JOHN B. DRAKE SCHOOL.

Calumet Ave., near 26th St.

PUBLIC SCHOOLS
OF THE
CITY OF CHICAGO

FORTY-SIXTH ANNUAL REPORT
OF THE
BOARD OF EDUCATION
FOR THE
YEAR ENDING JUNE 30, 1900

1901
HAGK & ANDERSON, PRINTERS, 167 ADAMS STREET

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Messrs. Sexton, Schwab and Dawes.

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ALBERT R. SABIN, .. District Superintendent of Schools, District 4
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HENRY SUDER, ... Supervisor Physical Culture
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MARY McCOWEN, ... Supervisor Schools for Deaf

FRED W. SMEDLEY, ... Director Scientific Pedagogy and Child Study

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Lincoln,
McPherson,
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Manierre,
Mitchell, Ellen,
Motley,
Oak Street,
Ogden,
Peabody,
Schiller,
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Drummond,
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Logan,
Lowell,
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Fulton,
Graham,
Greene, Nathanael,
Hancock,
Hedges,
Hendricks,
Hoerner,
Holden,
Holmes.
Kershaw,
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Parkman,
Raster, Hermann,
Seward,
Sherman,
Shields,
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Carter,
Cornell,
Curtis, George Wm.,
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Fallon,
Fernwood,
Gresham,
Harrison,
Hartigan,
Harvard,
Healy,
Kenwood,
Kozminski, Charles,
Lewis-Champlin,
McClellan,
McCosh,
Mann, Horace,
Normal Practice,
Park Manor,
Ray,
Scanlan,
Sheridan, Mark,
Sherwood,
Van Vlissingen,
Ward,
West Pullman,
Woodlawn,
Yale.

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Cummings,
Doolittle, James R., Jr.,
Douglas,
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Farren,
Forrestville,
Fuller, Melville W.,
Gallistel,
Greenwood Avenue,
Haven,
Jones,
Keith,
Madison Avenue,
Marsh, J. L.,
Moseley,
Oakland,
Oak Ridge,
Parkside,
Pullman,
Raymond,
Riverdale,
Scott, Walter,
Sheridan, Phil.,
Springer,
Stony Island Avenue,
Taylor,
Thorp, J. N.,
Webster,
Willard, Frances E.

REPORT OF THE PRESIDENT.

School and Location.	Rooms.	Awarded.	Estimated Cost.
Calumet Avenue, near 27th Street.....	19	July 26, 1899.	$ 90,000
Dore Addition, W. Harrison Street, near Halsted Street.....f	12	Oct. 4, 1899.	70,000

a With Assembly Hall, Kindergarten, Manual Training and Cooking Rooms.
b With Assembly Hall, Kindergarten and Manual Training Rooms.
c With Assembly Hall and Kindergarten Room.
d With Assembly Hall.
e With Laboratories, Lecture Rooms, Drawing Rooms, etc.
f With Manual Training Room.

BUILDINGS FINISHED DURING THE SCHOOL YEAR.

School and Location.	Rooms.	Awarded.	Opened.	Cost.
John Spry School, S. W. Boulevard and W. 24th Street.....	a 22	May 18, 1898.	Sept. 11, 1899.	$105,000
Winfield Scott Schley School, N. Oakley Ave., near Potomac Ave.....	b 22	Sept. 7, 1898.	Dec. 4, 1899.	110,000
Eugene Field Addition, Ashland and Greenleaf Avenues.....	c 12	Nov. 2, 1898.	Sept, 11, 1899.	50,000
West Pullman Addition, 120th Street and Parnell Avenue.....	12	April 19, 1899.	Feb. 26, 1900.	43,000

a With Assembly Hall, Kindergarten, Manual Training and Cooking Rooms.
b With Assembly Hall, Kindergarten and Manual Training Rooms.
c With Kindergarten and Manual Training Rooms.

LIST OF PRESENT VACANT SCHOOL SITES.

Daly and 36th street (Brighton Park), 236.49x127.
Carpenter street lot, between 90th and 91st streets, 100x125.
Armitage avenue lot, northwest corner 49th street, 225x125.
South Elizabeth street lot, near Hough avenue, 44x123.
Martin street lot, north of 107th place, 25x125.
Warren avenue lot, southeast corner Tallman avenue, 47x126.
Thirty-third place lot, south front, between Auburn and Morgan, 176x145.8.

Avenue "M" lot, corner 97th street, 194.7x124.

Brookline lot, 74th and Langley, 295.7x136.3.

Jeffrey avenue and 71st street lot, 297x115.5.

Loomis street lot, southwest corner 53rd street, 250x124.9.

Park avenue lot, corner South 50th avenue, 180x190.

Ninety-fifth street lot, corner Leavitt street, 175x175.

West 19th street lot 100 feet west of boulevard, 115.5x166. (Site for mental and manual training for the blind.)

Philip avenue lot, southeast corner 92nd street, 201.1x125.59.

Butler street lot, northeast corner 81st street, 297x200.

Rebecca street lot, northeast corner Washtenaw avenue, 199.02 x124.5.

Morgan street lot, southwest corner 117th street, 248.30x125.27.

Sawyer avenue lot, northwest corner 53rd street, 249.65x126.1.

North 64th avenue lot, near Cragin Station, half acre.

Union avenue lot, northeast corner 101st street, 198.4x125.16.

Calumet avenue lot, between 41st and 42nd streets, 195x128.

Mohawk street lot, northeast corner Menominee street, 163x119.

Prairie avenue lot, near 39th street, 200x264.

Edmunds avenue lot, northeast corner Goodman street, 263.25x150.

West Cullom street, southeast corner 42nd court, 247.25x155.69.

Kensington lots, Michigan avenue near 115th street, 80x241.7 and 36.2x253.

VACANT PROPERTY BELONGING TO THE SCHOOL FUND. DISTRIBUTIVE ACCOUNT.

North half of Lot 7, Block 2, Hilliard and Hitt's Subdivision (Washington Heights), 25x125.

Lots 55 and 56, Block 4, in Hough & Reed's Subdivision (Washington Heights), 50x125.

Lot 5, in Block 10, in Hegewich, 25x118.88.

Lots 2, 3 and 4, in Block 1, in Norwood Park, 150x127.

Lot 24, in Block 1, in Norwood Park, 50x127.

Sundry lots in Colvin's Subdivision, a total frontage of 964 feet.

Sundry lots in Thompson's Subdivision, a total frontage of 250 feet.

Lots 46, 47 and 48, in Block 1, in Boyd & Hall's Subdivision, 75x125.5.

The history of the year's work does not chronicle any startling innovations or amazing discoveries, but rather records that steady, conservative, but always healthy, growth which characterizes all true progress.

PARENTAL SCHOOL AND JUVENILE REFORM.

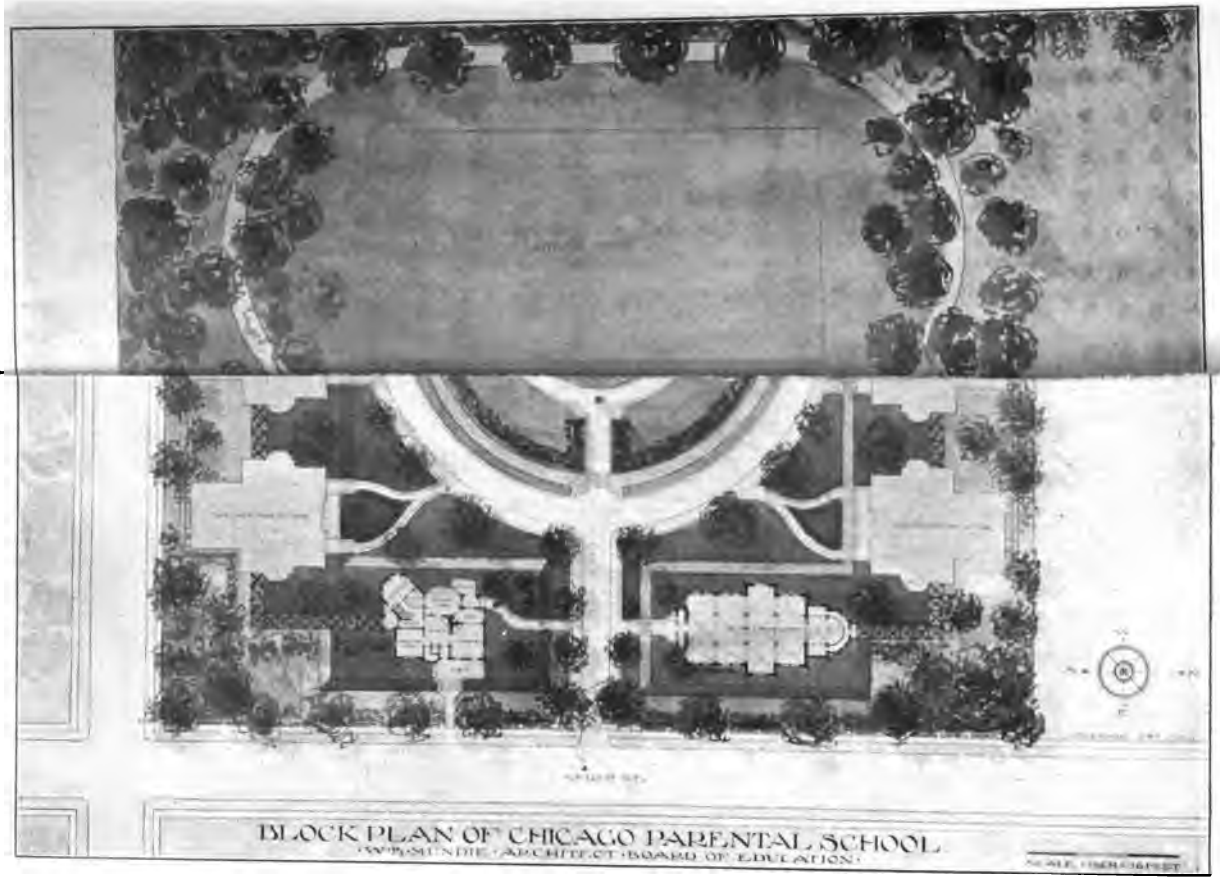
Undoubtedly one of the most important movements begun during the past year found its incipiency in the law passed by the last legislature relative to the juvenile class, which requires the Board of Education of the City of Chicago to build and maintain during the year 1901 a Parental School. This, together with the Juvenile Reform Law creating a Juvenile court and providing for a parole system and probation officers to look after truants, marks an epoch of great advance in reform work.

The influence of this law on the truant class of our city has already been marked and beneficial. The number of truants has been materially decreased and many of them have been transformed into faithful pupils of our public schools, and, perhaps, saved to future good citizenship through the wise, patient and laborious efforts of the probation and truant officers

The Board of Education promptly set out to carry out the provisions of the law requiring the establishment and maintenance of a Parental School. A superintendent was selected after a careful search for, and examination of, available candidates specially qualified for this important work.

After his election, on recommendation by the Committee on Compulsory Education, he was instructed to visit reform and home schools throughout the East and carefully investigate the systems there in vogue. Since all logical reform work with truants must in a large degree include manual training and constructive work, the Supervisor of Manual Training was directed to accompany the Superintendent of the Parental School on his tour of inspection and investigation.

Their reports, which follow, are replete with valuable suggestions and observations:


BLOCK PLAN OF CHICAGO PARENTAL SCHOOL

REPORT ON PARENTAL SCHOOL FROM MR. THOMAS H. MACQUEARY, SUPERINTENDENT OF PARENTAL SCHOOL.

To the Board of Education of Chicago:

Gentlemen—Acting under the instructions of the Committee on Compulsory Education, Mr. Robert M. Smith, Supervisor of Manual Training of Chicago, and myself made a visit to certain parental and reform schools in the east during July and August for the purpose of gathering data that might be used in the organization and management of the Chicago Parental School, and I desire to submit the results of our investigations.

As Superintendent Bodine's report on parental schools covered quite fully the constructive features of such schools, we confined our attention to the educational principles and practice of the schools visited, observing the construction of buildings only so far as this bore directly on the mental and moral development of the children.

The institutions visited were the State Industrial School, Rochester, N. Y.; the State Reformatory, Elmira, N. Y.; the "George Junior Republic," Freeville, N. Y.; the Boston Parental School, West Roxbury, Mass.; the Boston Sloyd School, the Lyman School for Boys (Massachusetts House of Refuge), Westboro, Mass.; the Truant Schools of Brooklyn and New York City; the Pratt Institute, Brooklyn; the Hebrew Technical School, New York City; the Teachers' College of Columbia University; the Cooper Institute; the Pennsylvania House of Refuge, Glen Mills, Pa.; the Miller Manual Labor School, Albemarle County, Virginia; the Cincinnati House of Refuge, Cincinnati, O., and the Manual Training School of St. Louis, Mo. As Mr. Smith paid special attention to the manual training equipment and instruction of these schools, and his report is herewith submitted, I shall speak chiefly of three features, viz., the physical, mental and moral instruction given, the system of discipline and the housing of the children.

An all-round education involves physical, manual, mental, moral and religious development. As all mental processes and moral habits are intimately correlated with man's physical nature, all educators recognize the paramount importance of

PHYSICAL CULTURE.

This is accomplished in the parental and reform schools.

1. By the military drill. No one at all familiar with this system doubts its value or efficacy. Most, if not all, of the children

committed to the parental and reform schools need physical reconstruction. They have suffered from malnutrition, due to poor food, badly cooked food or other causes; or they have formed slovenly habits of carriage and other bad habits. The "setting-up exercises" of the military drill alone go far towards correcting these defects. The children should be drilled regularly by a competent master, and, by the way, they should be uniformed. As the parental school is not a penal institution in fact or in law, the uniform cannot be considered "a prison garb," any more than the uniform of a military academy can be so considered. All reform and truant schools we visited use the uniform. The mental and moral effects of the militry drill are almost as important as the physical.

2. Gymnastic Exercises. A well equipped gymnasium is indispensable and thorough instruction in gymnastics of vital importance. A swimming pool and shower baths are also necessary—cleanliness being the first essential in such a school.

3. Manual Labor. Regular work at the bench and out of doors in the garden and elsewhere is one of the chief means and the natural means of physical development. While our opportunities for such work will be limited, owing to the size of our lot, yet something can be done in this line. Horses, cows and poultry should be kept, not only for use, but for the benefit of the boys, who, by the care of such animals, will be taught lessons in kindness, and also be furnished with wholesome work. While such work is not as important as the military and gymnastic exercises, yet it may very properly supplement these exercises.

MANUAL TRAINING.

Mr. Smith, in his report, suggests a course of manual training for the parental school, and I wish to emphasize what he says about gardening and light farming, and to add that domestic science (cooking and sewing) and laundry work should, of course, form a part of the course. All educators recognize the hygienic, economic and educational value of horticulture and agriculture. All the schools visited in the East devote much time and attention to these branches of study. In order to do this considerable land is necessary, and the reform schools visited have large farms, and one truant school in Massachusetts (the Hampshire and Franklin County school) has two hundred (200) acres of land and only a few boys. The other truant schools in Massachusetts have from ten (10) to thirty-six (36) acres each. The Boston Parental School, located at the very limits of West Roxbury, has twenty-seven (27) acres and is

urgently demanding more. It is the decided opinion of the superintendents of all the schools visited that a parental school should be located on a large tract of land at the limits of the city, or even well out in the country, and all insist that the truant should be given more manual training in the shop and out of doors and less book work.*

If the Chicago Parental School had sixty (60) or eighty (80) acres of land, it would be possible to do much more work along such lines than can be done on the present lot, especially since a considerable part of it—fifteen or twenty acres—must be used for building sites and play-grounds.

COURSES OF STUDY.

As the object of the Parental School is to reform the truant habit and return the pupils to the regular schools it seems necessary to conform more or less closely to the course of study used in the public schools. But I am convinced that the curriculum of the Parental School should differ considerably from that of the public schools. One cause of truancy is that the teaching of the public schools, owing either to its nature or its methods of presentation, fails to appeal to and interest the children. It is important, no doubt, to "teach the children to think," but it is even more important to teach truants to feel and act. In order to do this there must be less bookishness in their instruction and more of learning by applications. Their intellect must be aroused, their vagrant instinct arrested and held by an indirect appeal—i. e., through their physical activities. In short, manual and moral training is of primary importance in the parental school. The pupils must be forced to appreciate intellectual training by learning its value and necessity from occupations in the shop and out-of-doors that interest them. A wise and resourceful teacher is the first essential and a varied course of study is the second. The classes may be graded and the curriculum of the common schools may be followed in a general way, but a more elastic system of instruction is necessary for the Parental School. All the best schools visited in the east had programmes of study especially adapted to the needs of their pupils. The children must be kept in the school long enough to thoroughly reform the truant tendency and to teach them the supreme value of an education. They can be fitted to return to the public schools

*See annual report of the Massachusetts Board of Education 1897-'98, pp. 464-491 and Ibid, 1898-'99, pp. 637-674.

ing it. The object is "to diminish pauperism and crime by instilling into neglected children lessons of morality, responsibility and self-control." In order to do this very much is and must be left to the "citizens" (the boys and girls) which would be done by superior officers in an institution. The result is that it is easy to find small defects which might be remedied by Mr. George or others, but which must be left to the "citizens" to correct if the basic principle—"the republic idea"—is to be realized. It is my opinion and also the opinion of Mr. George himself that it would be a mistake to attempt to conduct an institution on such principles. We must either have a republic or an institution pure and simple. The conditions under which the republic is working are so different from those under which the Parental School must be conducted that "the republic system" cannot be successfully adopted in this school. The Lyman School at Westboro, Mass., is attempting to apply some of the Junior Republic's principles, but it has been only partially successful, and the officers of that school admitted that the success of the system depended on the personality of the head of the family, which would seem to be an admission that the boys do not, after all, govern themselves. In the George Junior Republic there is a regular judiciary and police system, and such a system ought not, in my judgment, to be adopted in the parental school. There are simpler and more effective means of discipline.

It is much easier to theorize on this subject than it is to apply a theory with good effect. The experience of men who have conducted parental and reform schools for years is worth any amount of theory and sentiment, and is worthy of serious consideration. The parental school law makes it the duty of the Board of Education to "prescribe the methods of discipline" for the school, and whatever rule or rules the Board may prescribe will, of course, be cheerfully enforced by the Superintendent. The molding of the characters of several hundred boys is a very difficult and delicate task, and no one rule, certainly no ironclad rule, can be successfully applied in every case. An elastic system of discipline is the only practicable system.

As stated above, great care must be exercised in the selection of teachers and officers. Firmness and kindness are the chief essentials to the effective management of children in the family or in the schools, and a strong personality is far more powerful than high walls or prison bars or "paddles." By the way, no wall—plank or stone—should be put around the school grounds to keep the children from running away. The parental school is to be a school, not a prison. The proper way to stop running away is to let the boys

DORMITORY COTTAGE—CHICAGO PARENTAL SCHOOL.

run away, recapture them and punish them for it. This is conclusively proved in the eastern schools. Hence a good paling fence around the grounds is all that is necessary to keep out intruders, and the officers in charge of the boys must "hold on" to them. If they escape, in spite of all efforts to hold them, they must be recaptured and disciplined. It is easily possible to create a public sentiment among the pupils against running away which will effectually reinforce the efforts and admonitions of the teachers and officers. There are escapes every year in all the schools visited, but every superintendent, with possibly one exception, condemned the idea of penning the boys in by a high wall. However, a large number of boys should not be committed to the school on its opening. If so, it might be necessary for the management to take a vacation for a few days! But begin with a small number and in a short time good discipline will be secured and others will be "assimilated" quite easily upon arrival.

III.

THE FAMILY.

In accordance with Superintendent Bodine's report it has wisely been decided to organize the school on "the cottage plan." This is the plan adopted in the best eastern schools, and others—older schools—are gradually coming to it. "The essence of the cottage system," as Mr. Chapin of the Lyman School says, "is the dividing of the boys into small groups, in which close personal contact of master and pupils is possible. It is, in a word, the 'individualization' of the boy." The Lyman School, the Glen Mills School, the Boston Parental School and the George Junior Republic have all adopted the cottage plan, and the two first named schools have especially fine cottages. Those of the Lyman School cost from $13,000 to $20,000 each, and those of the Glen Mills School cost $35,000 each, but the latter are double cottages, each accommodating fifty or sixty boys. These buildings are handsome brick structures, with sitting room, parlor, dining room, open dormitories and all the conveniences of a first-class dwelling house. It is specially important that each family have its separate dining room. The common dining room is inconsistent with the family plan. On the other hand, while each cottage should have a small kitchen for special purposes, there should be, for the sake of economy, a common kitchen, from which the food may be conveyed to each cottage either in a heated car, as at Glen Mills, or in a wagon, as at West-

boro. Moreover, I favor the double cottage for our school, since fewer buildings will be necessary and space will be economized—a necessity in this case. Each of the twin cottages should accommodate thirty boys or girls (not more) and each should be distinct in its organization and management. A family officer and a matron should be placed over each cottage and the boys or girls may serve the tables, keep the house in order, etc. As it is proposed to build to accommodate five hundred (500) pupils, at least eight double cottages will be necessary. As already indicated, these cottages should be neat, substantial brick buildings, with all modern conveniences. Cheapness in this case would be false economy. If Chicago is to have a first-class parental school it must be generously dealt with. The Boston Parental School is seriously hampered by lack of adequate equipment, although its cottages are excellent.

Among "the basic principles" of conducting an institution, laid down by Mr. Nibecker of the Glenn Mills School, is constant supervision. "The pupils," he says, "are the victims of bad habits. Constant supervision makes impossible, so far as it is possible to do it, the indulgence of vicious habits or actions. Unconsciously in very many cases the former habits are dropped and new ones formed without the pupil being aware of the change that is going on. Without constant supervision this end will not be attained in this way, but rather only by a direct and conscious conflict, on the part of the pupil, after sufficient moral strength shall have been gained to wage such a battle. A single hour of unrestrained life in each day will be enough to keep alive all the old methods of thought and action and to practically undo the work of the other twenty-three." Owing to the very great importance of this constant supervision the wise selection of family officers is quite as essential as the choice of teachers.

Now, in order to attain best results and realize the object of the school, it is necessary that the pupils be kept at school a sufficient length of time to form habits of study and good conduct. It is the constant complaint of superintendents, both of parental and reform schools, that the boys are not retained long enough to secure the desired results. "If it is economy," says Mr. Day of the Boston Parental School, "to send a boy here at all, it is certainly economy to keep him here long enough to admit of the possibilities at least of the good he gets becoming permanent. Money expended for the very short terms is usually wasted." Unfortunately the boys in a parental school come from an unfavorable environment, and if they remain in school only a few weeks and then return to their old sur-

roundings it must be expected that they will relapse and their last stage may be even worse than the first. It is, therefore, earnestly hoped that the Illinois law on this point will be liberally interpreted and applied. It reads: "No child shall be released upon parole in less than four weeks from the time of his or her commitment, nor thereafter until the superintendent of such parental or truant school shall have become satisfied from the conduct of such child that, if paroled, he or she will attend regularly the public or private school to which he or she may be sent." It is among the possibilities and even probabilities that a few years' experience will show that the best results can be attained only by retaining truants in a special school during the whole of a compulsory school age and giving them the special and thorough training which they need to make them good citizens. At any rate, it should be borne in mind that what is worth doing at all is worth doing thoroughly, and money expended to keep truants in a parental school for a few weeks is simply money wasted.

IV.

MAINTENANCE.

Of course, it is impossible to say beforehand just what it will cost to maintain the parental school after it is started, but the following facts and suggestions may be helpful: During the year 1899

The Glen Mills School (832 boys) expended	$122,621.36
The Lyman School (296 boys) expended	67,838.80
The Indiana Reform School (502 boys) expended	58,590.00
The Boston Parental School (201 boys) expended	37,062.83

These sums include all expenses. The salaries of the 83 officers and employes in the Lyman School in 1899 amounted to $27,437.24, and $18,086.12 was expended for provisions, groceries, furniture, beds and bedding and clothing for the 296 boys. The balance of the above named sum was expended on the plant, food for stock, fuel, light, tools, etc., etc. The salaries of the 86 officers and employes of the Glenn Mills School for 1899 were $42,070.50, and $29,709.09 was expended for provisions and clothing for the 832 boys in that institution. The balance of the $122,621.36 was spent on the plant.

It is estimated that the average cost per boy per week in the Boston Parental School is $3.68, but it is the opinion of those familiar with the situation that it will cost considerably more in Chicago.

The average cost per boy per week in the Lyman school is $4.56.

Some of the aforesaid schools have expenses which we shall not have. But, on the other hand, they pay smaller salaries and wages than we shall have to pay in order to secure the best talent—that which is absolutely necessary to the success of the school. Moreover, we shall have to pay more for provisions, etc.

In addition to the Superintendent and Assistant Superintendent, already secured, the following officers and employes will be needed to begin with, and I respectfully suggest that liberal compensation be allowed them, and that the salaries of the teachers be annually increased up to a certain point, as is done in other schools of the city:

Four teachers (one of whom shall be supervisor of school work).
One teacher manual training.
One teacher manual training.
One teacher domestic science.
One teacher freehand drawing.
One teacher mechanical drawing.
One teacher gymnastics and military tactics.
Seven family officers.
Seven matrons.
One chief matron.
One night engineer.
One day engineer, who shall also act as janitor.
One purchasing agent.
One gardener.
One laundryman and two assistants.
One chief cook.
Two assistant cooks.
One bookkeeper and stenographer.

Of course, we shall need sixteen masters and sixteen matrons of cottages when the school is completed. We shall also need four teachers at that time and seven ordinary laborers.

To summarize, then, I recommend:

(1). That the regular course of study in use in the public schools of Chicago be modified and adopted in the Parental School, emphasizing manual training, domestic science (cooking and sewing), gardening, laundry work, gymnastic and military exercises.

(2). That first-class double cottages (eight in number) be erected, each with a capacity for sixty (60) boys, or thirty (30) to a family, and each having an open dormitory, a dining room and small kitchen for special purposes, a parlor, two sitting rooms (one for officers and one for the boys) and all modern conveniences.

(3). That a liberal appropriation be made for current expenses. With such an equipment and appropriation Chicago can have a parental school superior to any in the country.

Respectfully submitted,

THOS. H. MAC QUEARY,
Superintendent of Parental School.

REPORT OF MR. ROBERT M. SMITH, SUPERVISOR OF MANUAL TRAINING, ON PARENTAL SCHOOL.

Chicago, September 5, 1900.

To the Board of Education:

Gentlemen—I have the honor to submit to you my report so far as it relates to the Department of Manual Training, with suggestions regarding what occupations should be introduced into the Chicago Parental School.

The most serious element in our present problem of education is to be found in the training and character of our teachers. This is true in all education, but notably true in the newer forms of manual training, which literally stands or falls with the character of its representative. Throughout the country this work is largely in the hands of untrained teachers. In no other branch would similarly disqualified teachers be admitted into the school service. Under these conditions it cannot be said that manual training has fairly been on trial in this country, and its success is the more significant.

In only one institution which I visited, the Sloyd Training School of Boston, which school was in session, is the whole of its attention devoted to the training of teachers of woodwork. The models—embodying carefully progressive exercises—are all completed articles, something useful and attractive which will engage the interest and feeling of the children, and perhaps serve as gifts for the father or the mother. The instruction includes bench work (joinery), lathe work, carving, and covers work for high school and grammar grades, as well as for the elementary schools. At this school, where only woodwork is taught, it is possible to offer a very complete course in an academic year of eight or nine months. At Columbia University, New York, which was also in session, the course covers both wood and metal, and consequently requires two academic years.

In several institutions which I visited no time whatever is given to theory, the course being entirely technical. The tendency, however, is toward a due admixture of theory.

The aim, with the exception of the State Industrial School, at Rochester, N. Y., the Glen Mills Industrial School, Pennsylvania, and the Miller Manual Labor School, Virginia, was nearly always stated to be educational; but, evidently, in many cases the term is used to cover all work given in school for either industrial or culture purposes, and the true distinction between educational and industrial has not always been grasped. I have noticed, however, on all sides an undoubted tendency to substitute finished articles for abstract exercises, and to make the work more human and educational by appealing unceasingly to the good will and the interest of the workers. Elementary schools should be elementary in every sense, and there should be higher schools to take up the work where the elementary schools leave it for these boys and girls who desire to study further.

For children who are to turn their attention to a trade there should be technical schools, not of the kind we are accustomed to at present, but equipped and managed to teach the boy his trade fully, instead of leaving him to the erratic pick-it-up-somehow teaching he gets at present in his apprenticeship. Such an arrangement would considerably lighten the curriculum of the elementary school.

Many heads of schools in the east fight shy of any definite name for this system of woodwork, and some of them even regard the term "system" as a vicious one in this connection.

The only school visited where the work was carried on on purely trade principles was the Miller Manual Labor School, Va. This school is unique in its character, but for lack of sufficient funds it is somewhat hampered in the matter of equipment, much of it being out of date. The younger pupils in this institution do not appear to me to receive that manual training which appeals to their interest and feelings, or which would insure their being able to grasp the principles of a trade when they reach the age at which they may be safely entrusted with the tools and machines commonly used by a mechanic. For pupils in the lower grades, or all grades below and including the eighth, a system should breathe the educational rather than the technical spirit. The superintendent of the Miller School, Va., believes that it is the duty of the state to provide trade schools, so that the pupil, in addition to the instruction which will beget industrious habits, special instruction in some kind of work may be given. If by the instruction gained in a trade school a boy is enabled to earn twenty-five or fifty cents more a day than he would as a common laborer, he has been provided with just so much additional capital as would earn the difference at ruling rates of interest.

It is not desirable, however, for a boy to begin too early to learn a trade. Learning a trade circumscribes, confines, dwarfs.

Mr. Nibecker, superintendent of the Glen Mills School, Pa., whose shops are constructed partly along educational lines and partly along technical lines, believes that what boys and girls who are committed to such institutions require is, in addition to a fairly good common academic education, an education in industry. By this he does not mean instruction in any particular kind of work, but work simply as applied effort.

Industrial training does not involve any detriment to the literary education of the pupils, but contributes largely to develop their faculties, to quicken their intelligence, and to fit them for their work in life.

In the matter of equipment Chicago has nothing to learn. Her schools are much better equipped than those of any of the eastern cities visited—in fact, many of the institutions visited, notably the Boston Parental School at West Roxbury, Mass., the Brooklyn Truant School, and the New York Truant School, have no equipment worthy of the name.

Regarding the equipment necessary for the Chicago Parental School, I should suggest one similar to that in the John Worthy School, substituting double for single benches and omitting some of the machinery.

The course of study I would suggest is as follows:

Grade I.—Clay modeling, paper folding and weaving.
Grade II.—Wire work.
Grade III.—Cardboard work.
Grade IV.—Modified sloyd.
Grade V.—Modified sloyd.
Grade VI.—Manual training (woodwork).
Grade VII.—Manual training (woodwork).
Grade VIII.—Manual training (woodwork).

In addition to the above I would also suggest that gardening form part of the course, as it has very beneficial influences upon the development of a child, and these influences may be grouped under three heads:

I. Those affecting the physical side of his nature.
II. Those affecting the intellectual side of his nature.
III. Those affecting the moral side of his nature.

I. The physique of the child is strengthened (a) by the manual labor involved in gardening, and (b) by working in the fresh air out of doors.

The child delights in the exertion of digging, watering and using the various garden tools. Tools should, of course, be proportioned to the child's height and strength. This involves having them of various sizes.

It is found in practice that a flower garden does not give children sufficient work to employ all their energies. The seeds or roots once planted or transplanted to their places, there is no more to be done, except a little watering or weeding, all the summer. A vegetable garden, on the other hand, needs continual tending. The plants come to perfection at different times, and some of them do so very rapidly. Thus sowing, transplanting, gathering and digging are going on nearly all the year round, providing continuous occupation for the little gardeners.

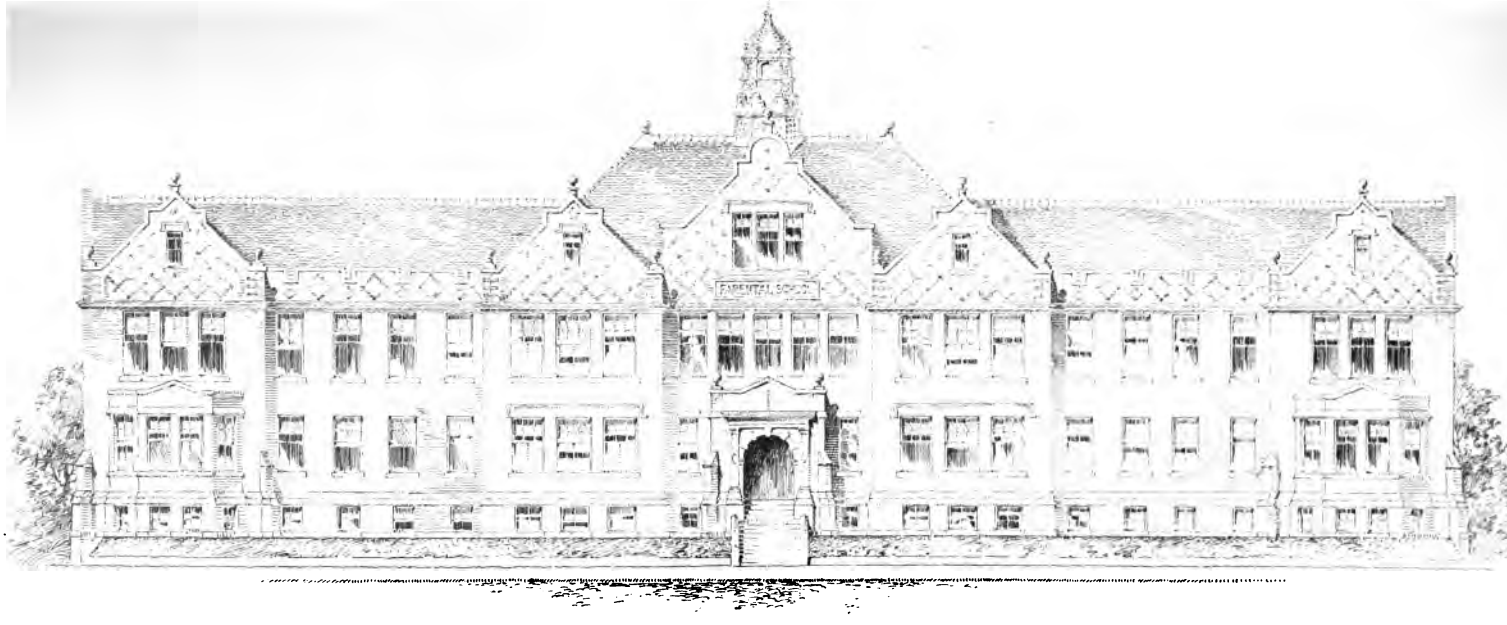
II. Gardening as affecting the intellectual side of the child's nature. In the course of his work the child learns much that is useful and interesting about plants and their habits. The plants useful for educational gardening may be roughly divided into five classes: 1. Flowers. 2. Vegetables. 3. Bird seed, wheat and other grain. 4. Plants grown from the pips or stones of common fruits, from acorns, etc. 5. Wild plants and so-called weeds.

To the childish mind there is much mystery in the interval elapsing between the planting of a seed in the ground and the appearing of the first shoot above ground.

III. It is unnecessary here to dwell upon the moral benefits to be derived from close intercourse with nature which is involved in the occupation of gardening. Every thoughtful person must realize how, in the hands of the true teacher, it may be made the means of leading the little ones to a new understanding of nature.

There are two ways of setting children to work at gardening. They may either cultivate a plat in common, or each boy may be provided with a plat of his own. The latter plan is the better and more "educative." If the child is one of a group cultivating a garden he cannot know for certain what is the effect of his share in the work. Unless a boy is sole master of a plat of his own he cannot be sure what are the results of his efforts, whether meritorious or defective.

The lessons in elementary science which are given in the schoolroom may be illustrated by practical work in the garden beds, and then the science will escape being mere book learning, and the gardening will be far more than mere technical training. The result of this combined indoor and outdoor instruction will be to enable the children to know what is the true nature of an experiment, what are the methods of science, in what way inferences are drawn, what



MAIN BUILDING — CHICAGO PARENTAL SCHOOL.

N. St. Louis Ave.,
bet. W. Balmoral and W. Berwyn Aves.

are the sources of error, and why it is easy for a merely practical man to underrate as to overrate the results of science and to make merry over "farming by gens." Even though on leaving school a child may live in a city and have no opportunity of keeping up his gardening, the time spent over it at school will not have been wasted, because he will have acquired the living knowledge of certain scientific facts which are becoming more and more indispensable in daily life. Each boy, then, should have a plot to himself. I would enter into details on this subject, regarding the management and cropping of a plot, list of tools, etc., but I deem it foreign to this report.

The reform schools which have made any attempt at teaching the use of tools seem to be quite generally committed to trade schools. There may be conditions in connection with this work which invalidate the conclusions reached by educators of boys of a higher grade outside of institution life, and I think they will be led gradually to adapt their courses more and more to the principles of educational manual training.

Permit me to recapitulate a few of the points in favor of the introduction of manual training as an integral part of the course of the Chicago Parental School.

1. Although fostered by the self interest of the community, the economic and utilitarian notion has steadily lost ground, while manual training for the disciplinary training it affords has come to the front, slowly at first but with great rapidity during the last four years.

2. That the peculiar conditions underlying reform school work make manual training of great value.

3. That manual training in all cases of boys under sixteen should precede trade teaching.

While this report is fragmentary in its character, it has the essential merit of being based upon material gathered at first hand.

I have the honor to remain, Yours respectfully,

ROBERT M. SMITH,
Supervisor of Manual Training.

A site has been selected near Bowmanville in the northern part of the city, plans for the building are being prepared and in all probability the school will be ready for occupancy by, or soon after, the opening of the school year commencing September 1, 1901.

The plans contain provisions for ample school room, dormitory,

and shop facilities, and are based on what is known as the "cottage plan."

Sixty acres of land have been set apart for the use of the school, thus furnishing abundant opportunity for the industrial education of the boys committed to the school.

It is confidently believed that the establishment of this school will materially decrease the number of inmates of the John Worthy School at the City Bridewell or House of Correction.

While this latter school is doing a great and good work among the truant and petty criminal classes of our city, still the environments of the boys while there are essentially degrading in their effects, and in a large measure, undo the work of the school. This difficulty will be overcome in the Parental School which will be actually, as far as possible, a home school and all the helpful influences suggested by that term will here be exerted to their utmost capacity.

MEDICAL INSPECTION.

On Nov. 1, 1899, at the suggestion of Dr. W. S. Christopher, the Board of Education voted to institute medical inspection of the schools. The work was placed under the charge of the Superintendent of Compulsory Education and has proven to be of inestimable value, as shown by the annual report of Mr. W. L. Bodine, Superintendent of Compulsory Education, who had charge of the work during the year.

ANNEXED TERRITORY.

The legal proceedings instituted last year to test the validity of the annexation of Austin at the election held in the spring of 1900, resulted in a decision confirming the annexation.

The Board of Education thereupon assumed charge of the schools and property in the annexed districts. Certificates were granted to principals and teachers employed in the various schools at the time of annexation, and they were elected as principals and teachers in the Chicago Public Schools at the annual election in June, 1900.

The division of school land in the annexed territory has not yet been completed, but will result in a substantial increase of the school fund property under the control of the Board of Education.

SCIENTIFIC CHILD-STUDY AND PEDAGOGY.

The work begun last year was continued during the year under the direction of Dr. W. S. Christopher and Professor Fred W. Smedley. The results obtained are clearly set forth in the appended report on the subject which is full of interesting facts and statistics.

MID-YEAR ADMISSIONS TO HIGH SCHOOL.

A new departure in admission of pupils to high school was inaugurated during the year whereby eighth grade pupils who had completed the work prescribed for the grade in the course of study, were, on the recommendations of their principals and the Superintendent of Schools, admitted to high school on February 1. This plan saves at least half a year to the pupils thus promoted and does not in any way retard those of the grade who remain and have an opportunity to secure promotion in June at the close of the school year. On the other hand, its effects are wholly beneficial in separating the advanced pupils from those who require, for various reasons, more time to complete the work of the grade.

This movement is a long stride in advance and is as logical as it is by demonstration practicable.

CRIPPLED CHILDREN'S SCHOOL.

The work begun in January, 1899, in behalf of crippled children has been carried on during the year with very satisfactory results, under the direction of Emma S. Haskell, teacher in charge. These children should have a separate school, and no expense should be spared to give them the best possible education and training which will enable them to become self-supporting and useful members of society. The course of study pursued in such a school should be laid out with special reference to their physical and mental needs. This is a subject that appeals with great force

to every citizen, and a sympathizing public will always approve what is done for this class of children.

In order to enable the children to reach the school which is temporarily accommodated in rented quarters at the corner of Ogden avenue and Madison street, it was necessary to provide transportation, which has been done.

Two teachers are employed to instruct the forty-five pupils enrolled at the present time.

ADDITIONAL SCHOOL ACCOMMODATIONS AND NEW BUILDINGS.

The erection of buildings to accommodate the pupils in rented rooms and in half day divisions was greatly hindered by labor troubles, and as a consequence the number of children in rented rooms increased during the year 1,073.

The labor situation is, however, gradually clearing, and it is confidently expected that during the ensuing year many new buildings will be commenced and completed. The report of the Committee on Buildings and Grounds, which is printed elsewhere in this report, contains a detailed account of the work performed during the year under such adverse conditions.

OPERATING EXPENSES.

I desire to call attention to the following table showing the cost of the operating expenses of the Board of Education during the past year.

I doubt very much if any of the public and private corporations can show as low a cost based on an equal expenditure.

This showing reflects credit on the Board of Education, its members and the heads of the various departments, and utterly disproves the baseless charges of extravagance which are frequently and publicly made.

I congratulate the citizens and taxpayers of Chicago upon the fact that the funds entrusted to the care and custody of the Board of Education are expended for public school purposes with so small an outlay for purely operating expenses.

OPERATING EXPENSES FROM JULY 1, 1899, TO JUNE 30, 1900.

Official salaries	$ 55,924.54
Architect's department	30,725.55
Carpenter's laborers, painters, etc	94,103.23
	$ 180,753.32
Total appropriation	7,524,161.17

Operating expenses equal .024+ per cent. of appropriation.

I submit herewith the report of E. Benjamin Andrews, Superintendent of Schools, together with reports from the District Superintendents and the various Committees of the Board which have been handed to me.

In conclusion I desire to acknowledge with thanks the courtesy shown me by the members of the Board, heads of departments and the employes generally. Respectfully submitted,

GRAHAM H. HARRIS,
President.

REPORT OF THE DEPARTMENT OF CHILD-STUDY AND PEDAGOGIC INVESTIGATION.

REPORT OF THE COMMITTEE ON CHILD-STUDY AND PEDAGOGIC INVESTIGATION.

Graham H. Harris, Esq., President of the Board of Education:

Sir: In the last annual report of this Board there was published an account of the child-study investigation, made under the personal direction of the chairman of this committee, during the last four months of the school year 1898-99. The Board, at its meeting of July 26, 1899, authorized the appointment of a special committee to consider the desirability of establishing in the school system of Chicago, an independent department for child-study and pedagogic investigation. The special committee so appointed, whose personnel was the same as that of the present standing committee, actuated by the results obtained in the preliminary investigation, submitted a report to the Board at its meeting of September 6, 1899, which was adopted without amendment, and from which the following extract is taken:

"There are many problems in pedagogy and child life, the solution of which can throw much light on educational procedures and materially assist in the school work; it is also desirable to have in the system a mechanism to determine, when possible, the relative value of various pedagogic methods; the varying educational needs of our large population, with its great diversity of nationalities and social peculiarities, should have accurate investigation by scientific methods; the great problems connected with dull and backward children call for earnest investigation; the type of child to be found in the parental school should also be considered. From these and other considerations we believe that there should be in the school system a department for the investigation of educational and child-study problems. The work of such a department should be limited to such of the various problems as may

arise, as have a distinct pedagogic bearing and educational value; its work should be conducted in accordance with approved scientific methods, especially the methods of physiological psychology. It should be its duty to make such investigations in child-study and pedagogy as may be suggested by the head of the department and approved by the Superintendent of Schools and the Standing Committee in charge of the department.

We recommend to the Board for its adoption the following:

1. That there be and is hereby established in the school system of Chicago, a department of child-study and pedagogic investigation, consisting of a director and such assistants as may, from time to time, be appointed to make such psycho-physical and allied investigations having a pedagogic bearing, as may be suggested by the director and approved by the Superintendent of Schools and the committee in charge of the work; and also to give such instruction to the principals and the teachers in the schools as may be directed by the Superintendent of Schools and the committee.

2. Qualifications of the Director: The Director shall hold a principal's certificate and be an expert in the methods of physiological psychology.

3. Qualifications of Assistants: Assistants must hold a grammar school teacher's certificate and pass an additional examination on the methods employed in the laboratories of physiological psychology. Instead of these certificates a special certificate covering the same grounds, may be issued by the Board on examination of candidates.

4. That a standing committee of five be appointed to have charge of the department."

At the same time the two gentlemen who had made the observations in the preliminary investigation, Messrs. Smedley and Campbell, were appointed, Mr. Fred. W. Smedley, director of the department, and Mr. C. Victor Campbell, assistant. An examination for assistants in the department was held September 16, 1899, and the special certificates required were granted to C. Victor Campbell, Chas. C. Krauskopf, and Daniel P. MacMillan, who were duly appointed assistants in the department. Later Miss A. Loesch joined

the corps as a voluntary assistant. Miss Loesch had already done considerable laboratory work in physiological psychology at the University of Chicago and was thoroughly qualified for the work. We wish here to acknowledge the high value of Miss Loesch's services, which were freely given in the cause of science. Later Miss Loesch was appointed to do similar work in the Chicago Institute.

At the election of teachers June 13, 1900, Fred. W. Smedley was re-elected director of this department, and also head of the Department of Child-Study in the Normal School, with the understanding that he was to give two days each week to the Normal School and four days to this department. The time of C. Victor Campbell was also divided between this department and the Normal School, he to devote five days per week to the child-study work of that school, and Saturdays only to the work in this department.

We wish to commend each and every member of the corps for high scientific ability, and for the careful and accurate work done. It would be unfair to omit mention of the fact that every member of the corps has put in many hours of extra work, entirely in the interests of the department, and without extra compensation.

Upon the recommendation of Dr. Frank Allport of this city, the Board, at its meeting of March 9, 1898, authorized an examination of the eyes and ears of all the school children of the city upon a plan devised by Dr. Allport, and used in numerous school systems throughout the country. Dr. Allport gave instruction to many teachers in the city upon the methods to be employed, and the work was carried out the next school year. Owing, however, to the fact that Dr. Allport had no official connection with the schools, and nobody was specifically charged with the conduct of the work, it fell into abeyance. Upon the recommendation of your committee, this work was, on April 4, 1900, put in the charge of this department, and Dr. Allport added to its staff as consulting oculist and aurist. Accordingly all the pupils were examined by their several teachers, and the reports made to the director of this department. This work calls the attention of each teacher to the visual and aural defects of the children under her care, a knowledge of which facts

on her part must be of great value, both to her and to the pupils. These examinations are to be repeated annually.

In the report of the preliminary investigation made last year, attention was called to the wide diversity of physical development of the pupils in individual rooms, and it was pointed out that the classes in physical culture should be arranged upon a physical, instead of an intellectual basis, as is now done. Your committee recommends that efforts to secure such an arrangement of the classes in physical culture, be made in the near future.

The preliminary investigation of last year established clearly that in each room there was a great range of physical capacity and endurance among the different pupils; it also established the fact that this differentiation constantly increased from the first grade to the eighth. It was also claimed that these facts called for increasing elasticity in the school work, and that such elasticity was especially called for in the upper grammar grades. The appended report of Director Smedley further supports this contention with some new and important facts. The desirability and necessity of such elasticity has long been recognized by progressive educators, and any adaptation of it must be of a purely pedagogical character. Your committee, therefore, recommends that the Superintendent of Schools be directed to investigate the matter and report such measures securing elasticity of work as may be found feasible.

The main work of the department throughout the year has been a continuation of the line of observations started in the preliminary investigation, with, however, a somewhat extended scope. By this means tables of norms of great value have been produced, and many interesting and valuable relationships shown. In all of the schools in which the child-study corps was engaged in making observations, instruction to the teachers was also given in child-study. This part of the work might be advantageously extended, and could be if the corps should be increased by the addition of one or two more teachers. Such increase would in other ways materially strengthen the department and increase its usefulness.

At the John Worthy School, attached to the Bridewell, meas-

CRIPPLED CHILDREN'S OMNIBUS.

urements were made of 284 boys. By comparing the results of these measurements with the norms obtained by measuring normal children, it is found that the boys in the John Worthy School are inferior in all the physical measurements taken, and this inferiority seems to increase with age. While the number examined at the John Worthy School is not sufficient to warrant far reaching conclusions, it is to be noted that the general result of the examination fits with the general observations of those familiar with the boys at the school. As the population of the school is constantly changing, it will be possible to add rapidly to the number of boys examined and thus obtain results which are more reliable. If further investigation confirms the observation of physical inferiority of the boys who are sent to the John Worthy School, it will have far reaching results. Such physical inferiority means, broadly, malnutrition. While this is not the place to discuss the causes of malnutrition, social, hereditary, dietetic, infectious, etc., it seems right, however, to remind the Board that the Parental School now in course of construction will be called upon to receive many of the boys who are now sent to the Bridewell in default of a more suitable place. In view, therefore, of the results of the measurements of the boys of the John Worthy School, your committee recommends that in the management of the Parental School, the physical welfare of the inmates be made a matter of fundamental care, and that to this end great attention be paid to the dietary of the institution, that it be wholesome, nutritious and sufficient; that provision be made for physical exercise, sufficient and not excessive in amount, and of a character adapted to the needs of the inmates; that ample and varied bathing accommodations be provided; that clothing adapted to the weather and the occupations of the school be supplied; and that the sleeping quarters be made thoroughly comfortable and hygienic.

At its meeting of April 4, 1900, the Board authorized the establishment of a psycho-physical laboratory in the department and appropriated $250.00 for the purchase of apparatus. As soon as the apparatus could be gotten together the laboratory was opened in a partially unused room connected with the offices of

the Board. The laboratory has been opened on Saturdays only, as upon other days the members of the corps have been engaged in their routine work in the schools. To the laboratory backward or difficult pupils may be brought from any school in the system, by the principals, upon previous arrangement with the Director of Child-Study. Each pupil is subjected to a careful and thorough psycho-physical examination and such advice given, as the results obtained suggest to the trained psychologists in charge. Miss Luella Heinroth, the principal of the Schiller School, brought to the laboratory some fifteen backward pupils, and after obtaining the results of the thorough investigation of each of them, very wisely asked that an ungraded room be established in her school for their benefit. The necessary action of the Board was obtained through the recommendation of the School Management Committee, and the room will be in operation next session. In this connection your committee desires to call attention to the principles involved in the establishment of this particular ungraded room and to recommend that they be followed hereafter in establishing similar rooms. The principles referred to are the following:

1. Limitation of the maximum number of pupils in the room to twenty.

2. Requiring all pupils who are to be assigned to the room to be first examined in the Child-Study Laboratory.

3. Requiring the course of study used in such a room to be especially determined for such room by the Superintendent of Schools, the Assistant Superintendent of the District, and the Director of Child-Study.

4. Requiring that the teacher assigned to such room shall be experienced in actual teaching and sufficiently versed in psychology and human anatomy, physiology and pathology to thoroughly understand and appreciate the results of the psycho-physical examination made in the laboratory, so that proper advantage may be taken of the results for the highest benefit of the pupils.

There will always be found in the school system a class of pupils who are so backward that they gain little or nothing from the ordinary course of instruction and whose presence in the gen-

eral class room is distinctly detrimental to the remaining pupils, but who are yet not so deficient mentally as to justify sending them to the State Institution for the Feeble Minded. Such pupils must be cared for in the common schools, but justice to them and to the more normal pupils demands that the two classes be separated and the backward pupils placed in the so-called "ungraded rooms."

A conservative estimate of the number of such backward pupils in the Chicago schools would indicate that at least one ungraded room should be established in every large school, say possibly two hundred such rooms throughout the city. These backward pupils present a mixture of pedagogical, psychological, and medical problems of the highest interest and the greatest complexity, and require, for their proper management, teachers of the highest skill and broadest knowledge and training. It will naturally be difficult to find teachers possessing the necessary qualifications for such work, and your committee therefore recommends that the establishment of ungraded rooms be proceeded with slowly and that steps be taken to establish in the Normal School courses of instruction, preferably post-graduate, for the training of teachers for ungraded rooms.

The analogy between the professions of pedagogy and medicine has often been pointed out. It is strikingly close. In its professional development pedagogy is now at the stage where medicine was a century ago, that is to say, rigid scientific research and the exact methods of the laboratory are breaking in upon the old time empiricism. Much can be learned to the benefit of pedagogy from the history of the development of the older profession. In medicine the scientific methods met with considerable opposition, but finally advanced to commanding positions, influencing radically the methods of professional thought and adding extensively to the stores of knowledge, and all to the great advantage of the profession, and of those who are the objects of its ministrations. The scientific methods are approaching pedagogy through the gateways of psychology and child-study, and they should be welcomed and encouraged by the profession, for not only is professional

development of the highest utility to pupils, but it is also the greatest safeguard of the teachers.

Critical scientific pedagogic investigation must necessarily increase the sum total of accurate pedagogic research, and to this end an extension of pedagogic research is much to be hoped for. Particularly is it desirable that research departments similar to our own, be established in the school systems of other large cities, for in this way not only is the bulk of work done very rapidly increased, but the benefit of many minds at work at the same time on different types of problems is obtained. Private research is doing, and has done, much for psychology and Child-Study, but it lacks the force and continuity of publicly supported research. In the medical sciences research has always lacked public support in English-speaking countries, while it has always received such support in the countries of continental Europe. The result has been that such of the new facts in these sciences as are of laboratory origin have mostly come from the continent of Europe, and in this way great honor and advantage have accrued to those countries and to the professional workers there, while corresponding disadvantages have been the fate of biological workers in the English-speaking countries. Educational interests, on the other hand, are remarkably well supported by public funds in this country. The schools are everywhere looked upon as the bulwark of the nation. The States generally have established minimum limits for the education of their children, and have provided means for the education of all far beyond these limits. The State practically monopolizes primary and secondary instruction. It seems only right, therefore, that the advancement of pedagogic knowledge should be a matter of public concern. So far as we are aware, your Board is the first public Board of Education to formally recognize these facts, and to establish in the school system under its charge a special department for pedagogic research. There is a Pedagogic Laboratory at Antwerp, Belgium, but whether it constitutes an exception to this statement we are unable to say.

The child-study investigation in the Chicago schools has met with much favorable criticism both in this country and in Europe.

During the coming school year it is intended to put the department at work upon some problem of immediate pedagogic interest, the particular problem to be determined by the Superintendent of Schools.

Appended hereto is the report of Director Smedley, giving in detail the results of the scientific work of the department during the past year. This document is replete with facts of great value to the school system, and more than justifies the action of the Board in establishing the department. Special attention is called to that portion of the report relating to the pubescent period of life. The reccmmendations contained in Mr. Smedley's report meet with our full approbation.

In conclusion we give the following brief outline of the objects and functions of the Department of Child-study and Pedagogic investigation:

I. Research Work—

a. Collecting anthropometric and psycho-physical data for the purpose of establishing norms, and for determining such relationships as may be of service in pedagogy.

b. Applying accurate scientific methods to specific pedagogic problems, particularly methods of teaching, and determination of the pedagogic value of various studies.

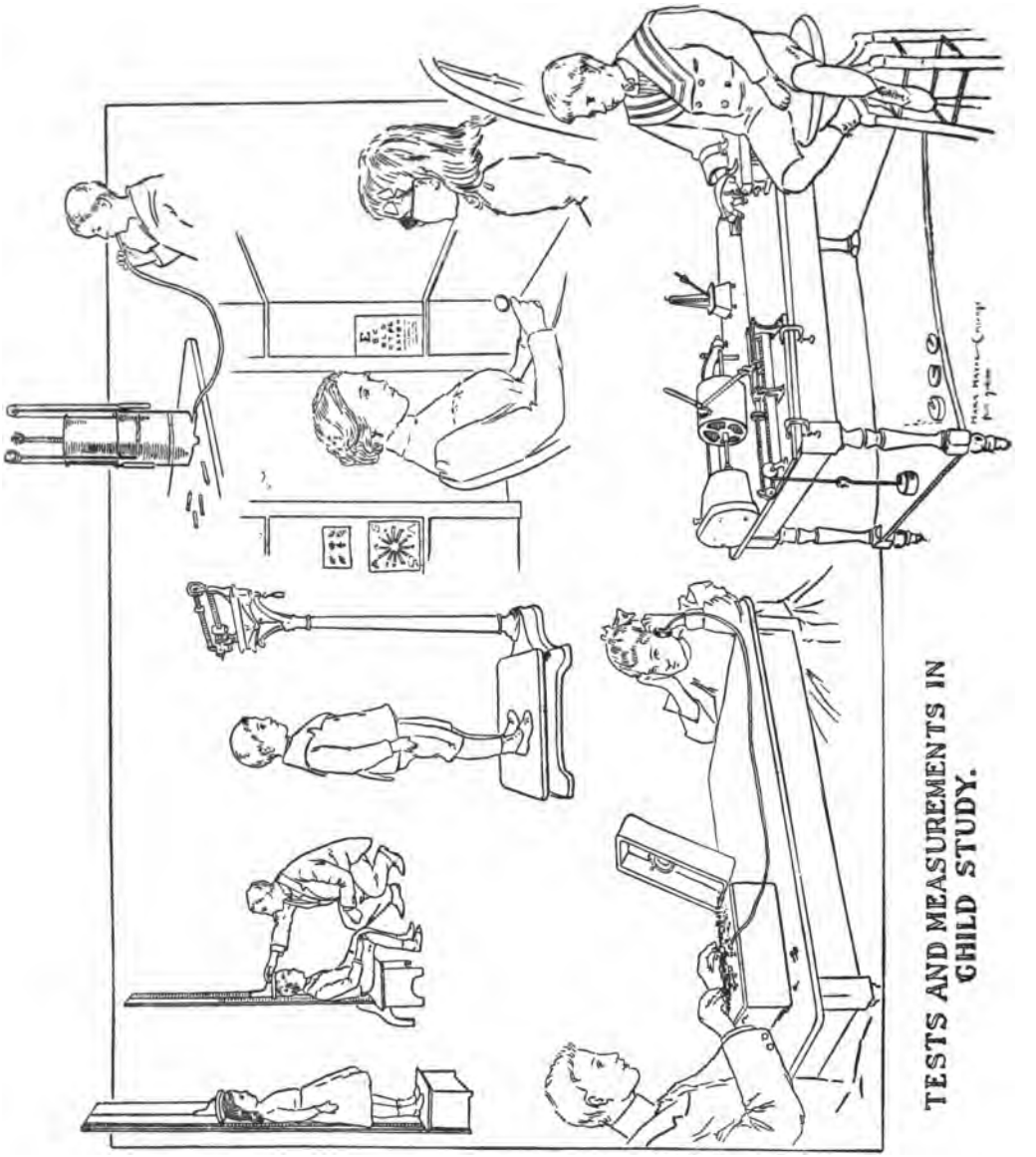
II. Examination of Individual Pupils with a view to advising as to their pedagogic management.

III. Instruction to Teachers in child-study and psychology.

Respectfully submitted,

W. S. CHRISTOPHER,
F. J. LOESCH,
C. MEIER,
CLAYTON MARK,
JOSEPH STOLZ,
Committee on Child-Study
and Pedagogic Investigation.

FIG. 1.



TESTS AND MEASUREMENTS IN CHILD STUDY.

REPORT OF DIRECTOR FRED W. SMEDLEY.

To the Committee on Child-Study and Pedagogic Investigation, W. S. Christopher, Chairman:

Gentlemen, As suggested by you, the work of the Department of Child-Study and Pedagogic Investigation for the past year has consisted mainly of a continuation of the tests inaugurated by Dr. W. S. Christopher in March, 1899, and reported by him in the Annual Report of the Board of Education for last year. It seems but natural that the starting point for a systematic pedagogical study of Chicago school children should be an attempt to determine the laws of their growth and the relationship which may exist between physical growth and mental development.

As the methods and apparatus were fully described in Dr. Christopher's report, they will receive only the briefest consideration here. The results of the tests on each individual pupil were recorded on a card, the following copy of which will serve to show the scope of the data collected:

No.....		
Name.....		
Grade..... No. of weeks in this Grade.....		
School..... Room No.....		
Teacher.....		
Date of Birth—Year..... Month..... Day.....		
Place of birth.....		
Place of birth of father.....		
Place of birth of mother.....		
School Standing.....		
Attention.....		
Memory.....		
Judgment.....		
Best work is in.....		
Poorest work is in.....		
Deportment.....		
Date.....		
Age.....		
Height with shoes.....		
Height of heel.....		
Net height.....		
Height sitting.....		
Weight with clothes.....		
Weight of clothing, est.....		
Net weight, est.....		
Ergograph—Hour.....		
Weight used.....		
Centimeters travelled.....		
Work—Centm. Kg.....		
Duration of work.....		
Strength of Grip, R. H.....		
" " L. H.....		
Vital Capacity.....		
Audiometer, R.....		
" L.....		
Visual Acuity, R.....		
" " L.....		
Motor Ability.....		
.....		
.....		

The use of cards, with one color for the boys and another for the girls allows the quick compilation of the data in any manner desired by changing the grouping of the cards.

THE ESTABLISHMENT OF NORMS.

Up to date tests have been made on the pupils of the Alcott, Kozminski, Andersen and Tennyson elementary schools, the eighth grade and the kindergarten in the Hoyne School, the kindergartens of the Burr,, Kinzie and Sheldon schools, and also the pupils of the Englewood and Lake View High schools, in all 6,259 pupils—2,788 boys and 3,471 girls. The pupils of these schools are largely of American parentage and are the children of parents in comfortable circumstances, so that they are uniformly well fed and clothed. Therefore, it is believed that they may be taken to represent normal Chicago children living under good conditions. From these tests and measurements tables of norms have been compiled. As we were obliged to compile the data several times we have been able to watch the changes which added numbers have produced. These changes of the norms from the addition of the last set of cards representing the measurements of about fifty pupils of each year of age, between the ages of six and sixteen, have been so slight that it is believed that these norms are fairly representative of the class of pupils tested for these years. And probably large additions to these figures, if the data were taken from the same class of pupils, would but slightly change the averages thus established. The norms for the upper years, sixteen to twenty-one, and also for the kindergarten ages, four to six, on account of the paucity of numbers can hardly be considered so completely established. In these compilations averages have been used rather than medians, although the difference between averages and medians proved insignificant. The mathematical computations were made by means of a comptograph, so "machine accuracy" in the results has been obtained. That these results may be quickly and clearly understood charts have been made of the growth and development along the lines in which tests and measurements have been made. It is not assumed that a single child grows at exactly the same

regular movement upward as is shown by the tables and charts, yet it is believed that ordinarily children do not differ widely from this rate, and the average of a small number of the same class of boys and girls taken from year to year would give us figures almost identical with the results of these compilations. So these tables fairly show laws of growth and physical development.

There is a prevalent belief, growing out of the evolutionary doctrine of the survival of the fittest, that the average represents the ideal type. As these measurements must include many imperfect specimens, children who, through disease, malnutrition and other insalutary conditions, have failed to attain the growth and development that they otherwise would have reached, in all probability the evolutionary ideal type will be found somewhat above the average in each measurement. These averages are representative of the class of children measured, and are highly important as a basis of comparison. It may be added that comparison of these measurements with those taken in other cities shows the superiority of this class of Chicago school children in both size and physical development.

TABLE I. NORMS—BY AVERAGES.

BOYS.

AGES.	Number Examined.	Standing Height. Millimeters.	Sitting Height. Millimeters.	Weight with Clothing. Kilograms.	Work on Ergograph. Kilogram-Centimeters.	Grip of Right Hand. Kilograms.	Grip of Left Hand. Kilograms.	Vital Cap'city. Cubic Centimeters.
4-6-13	41	1012	583	16.984	.....	5.50	5.06	736
5-7-14	70	1076	612	18.402	82.1	7.80	7.12	930
6-6- 6	227	1133	636	20.716	105.4	10.	9.32	1098
7-5-27	230	1183	658	22.535	139.2	11.50	10.91	1240
8-5-21	255	1224	677	25.022	168.2	13.27	12.40	1388
9-6- 4	228	1289	699	27.616	205.6	15.39	14.54	1549
10-6- 2	254	1330	713	29.837	235.	17.68	16.66	1659
11-5-17	228	1370	729	32.519	267.7	19.94	18.72	1799
12-5-23	256	1418	747	35.626	297.8	22.40	20.58	1956
13-5-14	230	1488	777	40.276	357.2	26.26	24.23	2246
14-5-20	250	1546	806	44.786	423.8	30.29	27.94	2527
15-5-25	205	1613	837	50.994	513.5	36.30	33.65	2858
16-5-15	146	1665	871	55.219	584.7	42.12	38.82	3363
17-5-18	92	1690	891	59.243	651.4	46.99	42.74	3570
18-4-27	40	1731	914	62.858	700.9	51.04	46.75	3701
19-4-18	23	1721	911	64.396	733.4	54.11	49.33	3872
20-5-12	8	1741	922	68.294	737.8	56.	48.50	3788
21-3-14	5	1704	911	63.955	727.4	52.	47.40	3770

GIRLS.

4-7-10	26	1008	585	16.342	.....	5.64	5.17	754
5-7- 2	81	1065	602	17.972	62.2	7.22	6.66	855
6-6- 8	204	1125	629	19.966	96.3	9.15	8 52	1008
7-6-15	226	1185	653	22.115	109.5	10.71	10.06	1121
8-6- 1	232	1228	674	23.995	142.5	11.67	10.96	1215
9-6- 7	221	1278	692	26.540	171.4	13.89	13.01	1360
10-5-15	240	1322	708	28 969	190.1	15.37	14.40	1456
11-5-16	223	1381	726	32.132	221.7	17.57	16.50	1567
12-5-15	247	1441	762	36.326	245.9	20.09	18.88	1729
13-6-13	255	1513	797	41.629	294.5	23.60	21.51	1924
14-6-13	301	1564	826	47.181	344.2	26.19	24.11	2117
15-6- 1	379	1574	840	49.345	356.5	27.92	25.81	2225
16-6- 0	364	1592	851	51.964	367.3	29.50	27.31	2306
17-5-10	251	1597	853	52.761	370.1	29.62	27.11	2304
18-4-25	137	1595	857	53.015	381.6	29.84	27.76	2351
19-5- 4	48	1599	855	54.600	416.8	31.21	28.85	2441
20-4-12	22	1598	848	54.033	363.3	29.96	27.45	2348
21-5- 8	4	1583	862	54.763	506.9	32.19	29.31	2280

BIRTHDAY NORMS.

In compiling these norms the age at the last birthday was used. It was assumed that the actual average age for any year would be that year and about six months. When the average ages were made out it was found, as will appear on the table, that in some years the ages averaged above the half year and in some below. In order to ascertain the norms for the exact years and half years, the daily and monthly increments were calculated. The increment between any two average ages divided by the exact number of days between those ages gives the average daily increment, and this multiplied by thirty and five-twelfths gives the average monthly increment. On this basis a table of norms computed to integral years and half years for the ages from six to eighteen and a half, has been calculated and is given in both the French and the English systems of measurements, together with a table of the monthly increments. In these tables, where the averages of the girls are greater than the averages of the boys for corresponding ages, the measurements have been printed in heavy-faced type.

These norms, computed to the integral years, are, for the sake of convenience, termed "Birthday Norms."

TABLE II. BIRTHDAY NORMS.

BOYS.

AGE.	Standing Height. Millimeters.	Sitting Height. Millimeters.	Weight With Clothing. Kilograms.	Work on Ergograph. Kilogram-Centimeters.	Grip of Right Hand. Kilograms.	Grip of Left Hand. Kilograms.	Vital Cap'city. Cubic Centimeters.
6-0	1106.9	624.0	19.738	92.86	9.21	8.48	1022
6-6	1132.5	635.4	20.675	104.79	9.97	9.29	1096
7-0	1158.2	646.7	21.613	122.12	10.74	10.11	1168
7-6	1183.9	657.8	22.550	139.45	11.51	10.93	1241
8-0	1209.3	667.5	23.817	154.17	12.41	11.67	1316
8-6	1234.8	677.2	25.083	168.89	13.31	12.43	1392
9-0	1261.4	687.9	26.336	187.07	14.34	13.47	1469
9-6	1288.0	698.5	27.589	205.24	15.37	14.51	1547
10-0	1309.1	705.6	28.707	220.03	16.52	15.59	1603
10-6	1330.3	712.6	29.825	234.82	17.67	16.66	1659
11-0	1351.1	721.0	31.223	251.86	18.85	17.72	1732
11-6	1371.9	729.3	32.619	268.89	20.03	18.80	1806
12-0	1395.4	738.0	34.151	283.83	21.24	19.71	1883
12-6	1418.9	747.0	35.684	298.75	23.45	20.62	1960
13-0	1455.4	762.4	38.084	329.21	24.44	22.51	2106
13-6	1490.9	777.9	40.485	359.69	26.43	24.40	2257
14-0	1519.2	792.1	42.696	393.62	28.42	26.22	2396
14-6	1547.4	806.4	44.908	425.55	30.40	28.04	2533
15-0	1580.7	821.8	47.998	470.13	33.39	30.88	2697
15-6	1614.1	836.8	51.078	514.72	36.38	33.73	2860
16-0	1640.3	854.3	53.238	551.22	39.37	36.39	3120
16-6	1666.5	871.7	55.398	587.73	42.35	39.04	3380
17-0	1678.5	881.6	57.384	630.64	44.74	40.96	3483
17-6	1690.4	891.4	59.371	653.53	47.14	42.87	3586
18-0	1712.8	903.0	61.288	679.73	49.28	45.01	3655
18-6	1734.1	914.6	63.204	705.82	51.43	47.16	3725

GIRLS.

6-0	1096.6	617.2	18.870	87.79	8.36	7.74	950
6-6	1125.1	629.0	19.932	97.90	9.12	8.49	1006
7-0	1153.7	640.7	20.974	108.00	9.88	9.24	1061
7-6	1182.2	652.5	22.026	118.10	10.65	9.99	1117
8-0	1204.9	663.4	23.010	130.24	11.16	10.48	1165
8-6	1227.5	674.3	23.994	142.38	11.67	10.96	1214
9-0	1252.4	683.2	25.257	156.73	12.77	11.97	1286
9-6	1277.4	692.1	26.520	171.08	13.88	12.99	1358
10-0	1300.7	700.5	27.795	180.98	14.65	13.72	1409
10-6	1324.1	708.9	29.072	190.88	15.43	14.46	1460
11-0	1353.5	722.3	30.662	206.90	16.54	15.52	1536
11-6	1383.0	735.8	32.250	222.92	17.65	16.58	1592
12-0	1413.1	749.3	34.373	234.92	18.92	17.78	1664
12-6	1443.2	762.9	36.495	246.92	20.19	18.97	1736
13-0	1476.8	779.1	38.974	269.89	21.84	20.39	1827
13-6	1510.4	795.4	41.454	292.86	23.49	21.80	1918
14-0	1536.4	809.9	44.219	318.12	24.79	22.92	2014
14-6	1562.4	824.3	46.983	343.38	26.10	24.03	2111
15-0	1568.3	832.1	48.161	349.33	27.00	24.92	2168
15-6	1574.2	839.9	49.339	356.29	27.91	25.80	2225
16-0	1583.0	845.4	50.653	361.10	28.70	26.56	2266
16-6	1591.8	850.9	51.964	365.92	29.50	27.31	2306
17-0	1592.6	852.0	52.396	370.74	29.56	27.43	2319
17-6	1593.4	853.0	52.807	375.55	29.63	27.55	2331
18-0	1594.2	855.1	52.923	380.37	29.75	27.66	2343
18-6	1595.0	857.2	53.039	385.19	29.87	27.77	2355

TABLE III.

AVERAGE MONTHLY INCREMENT OF BIRTHDAY NORMS.

BOYS.

AGE.	Standing Height. Millimeters.	Sitting Height. Millimeters.	Weight with Clothing. Kilograms.	Work on Ergograph. Kilogram-Centimeters.	Grip of Right Hand. Kilograms.	Grip of Left Hand. Kilograms.	Vital Cap'city Cubic Centimeters.
6½ to 7½	4.2	1.8	.156	2.89	.12	.14	12
7½ to 8½	4.2	1.6	.211	2.45	.15	.13	13
8½ to 9½	4.4	1.7	.209	3.03	.17	.17	13
9½ to 10½	3.5	1.2	.187	2.46	.19	.18	9
10½ to 11½	3.5	1.4	.223	2.84	.19	.18	12
11½ to 12½	3.9	1.5	.256	2.50	.20	.15	13
12½ to 13½	6.1	2.6	.400	5.08	.32	.32	25
13½ to 14½	4.7	2.4	.368	5.49	.33	.30	23
14½ to 15½	5.6	2.5	.514	7.43	.50	.48	27
15½ to 16½	4.4	2.9	.360	6.06	.50	.44	43
16½ to 17½	2.6	1.6	.331	4.49	.40	.32	17
17½ to 18½	3.7	1.9	.320	4.34	.36	.36	11

GIRLS.

6½ to 7½	4.7	2.0	.175	1.68	.12	.12	9
7½ to 8½	3.8	1.8	.164	2.02	.09	.08	8
8½ to 9½	4.2	1.5	.211	2.39	.18	.17	12
9½ to 10½	3.9	1.4	.213	1.65	.13	.12	8
10½ to 11½	4.9	2.3	.265	2.67	.18	.18	11
11½ to 12½	5.0	2.2	.353	2.00	.21	.20	12
12½ to 13½	5.6	2.7	.413	3.83	.28	.23	16
13½ to 14½	4.3	2.4	.461	4.21	.23	.19	16
14½ to 15½	1.0	1.3	.196	1.08	.15	.15	10
15½ to 16½	1.5	.9	.219	.80	.13	.12	7
16½ to 17½	.1	.2	.070	.80	.01	.02	2
17½ to 18½	.1	.3	.019	.80	.02	.02	2

TABLE IV.

TRANSLATION OF BIRTHDAY NORMS INTO THE ENGLISH SYSTEM OF WEIGHTS AND MEASURES.

BOYS.

AGE.	Height, Inches.	Height Sitting. Inches.	Weight. Pounds.	Ergograph Foot-Pounds.	Right Hand Grip, Pounds.	Left Hand Grip. Pounds.	Vital Cap'city. Cubic Inches.
5-0	43.58	24.57	43.52	6.33	20.30	18.70	62.403
5-6	44.59	25.02	45.59	7.58	21.98	20.48	66.856
7-0	45.60	25.46	47.66	8.84	23.68	22.29	71.248
7-6	46.61	25.90	49.72	10.09	25.38	24.08	75.701
8-0	47.61	26.28	52.52	11.15	27.36	25.73	80.276
8-6	48.61	26.66	55.31	12.22	29.35	27.41	84.912
9-0	49.66	27.09	58.07	13.53	31.62	29.70	89.609
9-6	50.71	27.50	60.83	14.85	33.89	31.99	94.367
10-0	51.54	27.79	63.30	15.92	36.43	34.38	97.783
10-6	52.38	28.06	65.76	16.99	38.96	36.73	101.199
11-0	53.20	28.39	68.85	18.22	41.56	39.07	105.652
11-6	54.02	28.72	71.92	19.45	44.17	41.45	110.166
12-0	54.94	29.06	75.30	20.53	46.83	43.46	114.963
12-6	55.87	29.40	78.68	21.61	49.51	45.46	119.560
13-0	57.30	30.02	83.98	23.82	53.89	49.63	128.588
13-6	58.70	30.63	89.27	26.02	58.28	53.80	137.677
14-0	59.82	31.19	94.14	28.41	62.67	57.81	146.095
14-6	60.93	31.75	99.02	30.79	67.03	61.82	154.513
15-0	62.24	32.36	105.82	34.01	73.62	68.09	164.617
15-6	63.55	32.95	112.63	37.24	80.22	74.37	174.460
16-0	64.59	33.64	117.39	39.89	86.81	80.24	190.320
16-6	65.62	34.32	122.15	42.52	93.38	84.06	206.180
17-0	66.10	34.71	126.53	44.90	98.65	90.31	212.463
17-6	66.56	35.10	130.91	47.28	103.94	94.52	218.746
18-0	67.42	35.55	135.14	49.18	108.67	99.24	223.955
18-6	68.28	36.01	139.36	51.06	113.40	103.98	227.225

GIRLS.

5-0	43.179	24.301	41.608	6.351	18.43	17.07	57.950
5-6	44.299	24.766	43.928	7.083	20.11	18.72	61.366
7-0	45.425	25.226	46.248	7.813	21.79	20.37	64.721
7-6	46.541	25.691	48.568	8.544	23.48	22.03	68.137
8-0	47.441	26.120	50.737	9.422	24.61	23.11	70.165
8-6	48.332	26.550	52.907	10.300	25.73	24.17	74.054
9-0	49.311	26.900	55.691	11.338	28.16	26.39	78.446
9-6	50.296	27.250	58.476	12.377	30.61	28.63	82.838
10-0	51.314	27.591	61.288	13.093	32.30	30.25	85.949
10-6	52.235	27.912	64.103	13.809	34.02	31.88	89.060
11-0	53.292	28.440	67.610	14.969	36.47	34.22	93.086
11-6	54.454	28.971	71.116	16.127	38.92	36.56	97.112
12-0	55.640	29.503	75.792	16.996	41.72	39.20	101.504
12-6	56.824	30.033	80.471	17.864	44.52	41.83	105.896
13-0	58.147	30.676	85.938	19.525	48.16	44.96	111.447
13-6	59.468	31.318	91.406	21.187	51.80	48.06	116.998
14-0	60.494	31.889	97.503	23.013	54.66	50.54	122.854
14-6	61.518	32.455	103.598	24.837	57.55	52.99	128.778
15-0	61.750	32.763	108.195	25.808	59.54	54.95	132.241
15-6	61.992	33.070	108.792	25.778	61.54	56.89	135.725
16-0	62.328	33.286	111.688	26.125	63.28	58.56	138.226
16-6	62.675	33.503	114.580	26.474	65.05	60.22	140.666
17-0	62.707	33.546	115.514	26.823	65.18	60.48	141.759
17-6	62.738	33.586	116.439	27.171	65.33	60.75	142.191
18-0	62.770	33.668	116.695	27.520	65.50	60.99	142.923
18-6	62.801	33.751	116.951	27.866	65.86	61.23	143.655

CHART I.

Growth in Height and Height Sitting.
Based on Data in Table I.

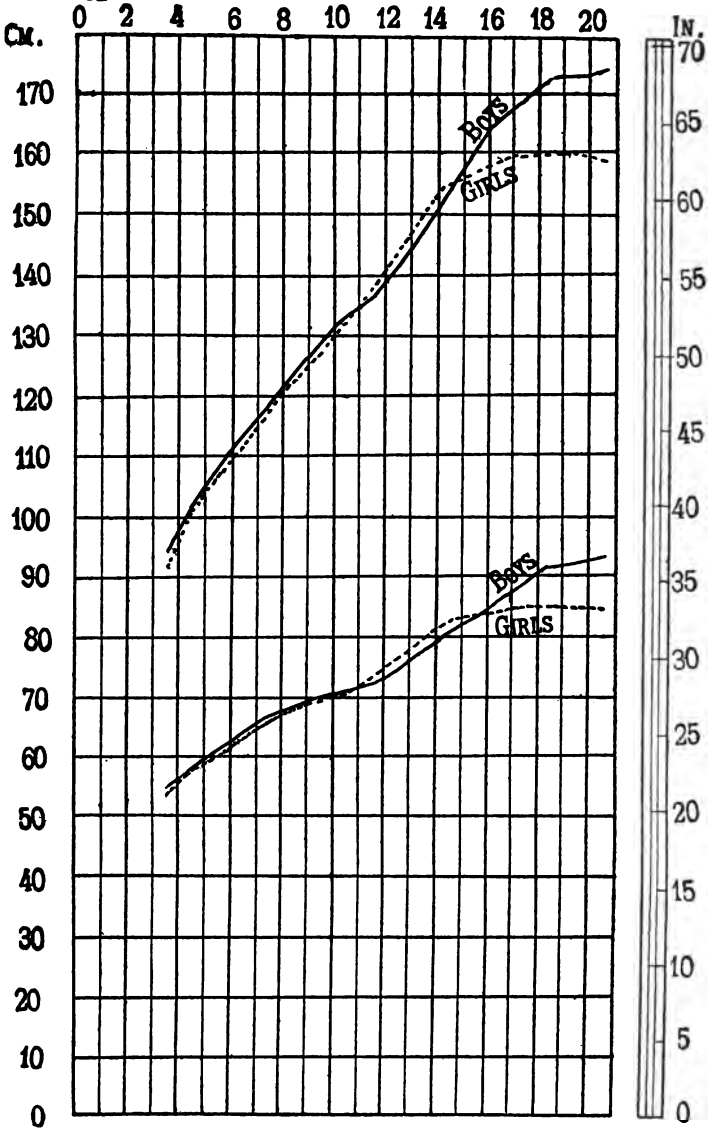


CHART II.

Growth in Weight and Development of Strength.
Based on Data in Table I.

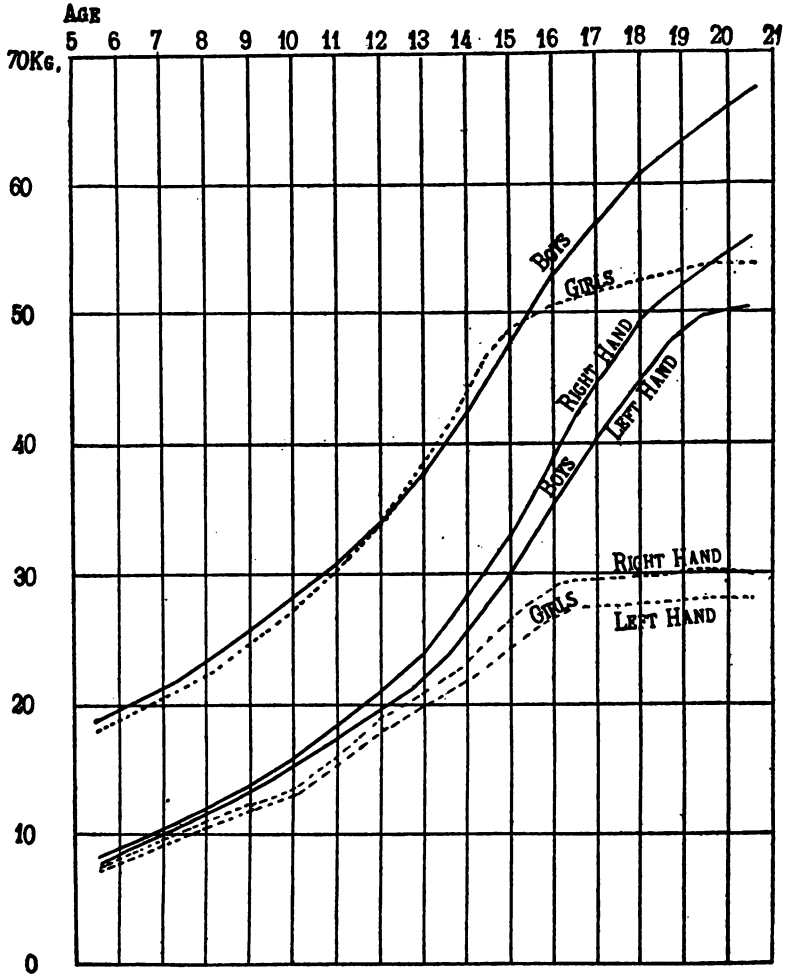


CHART III.

Development of Vital Capacity.

Based on Data in Table I.

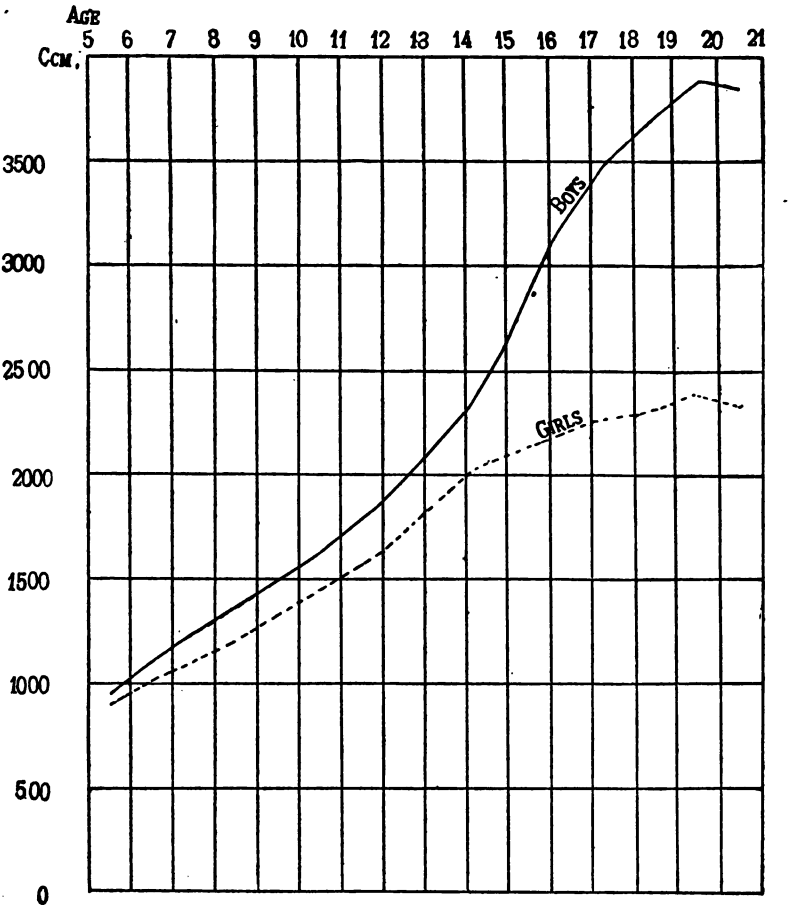
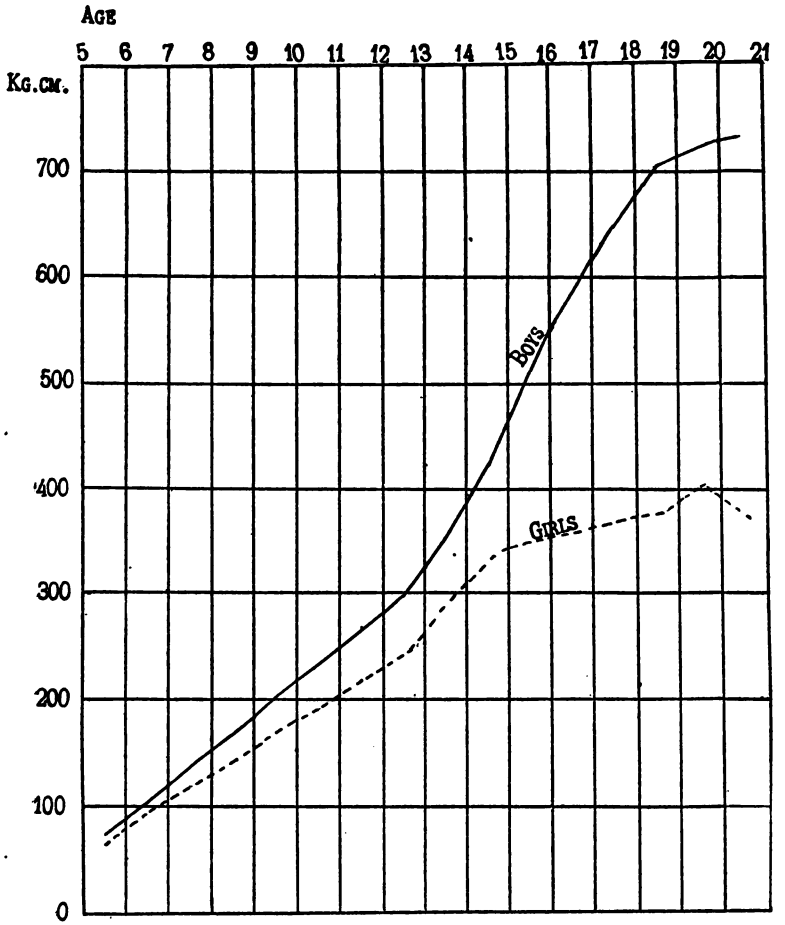


CHART IV.

Development of Endurance as Determined by the Power to Do Work on the Ergograph.

Based on Data in Table I.



GROWTH IN HEIGHT AND HEIGHT SITTING.

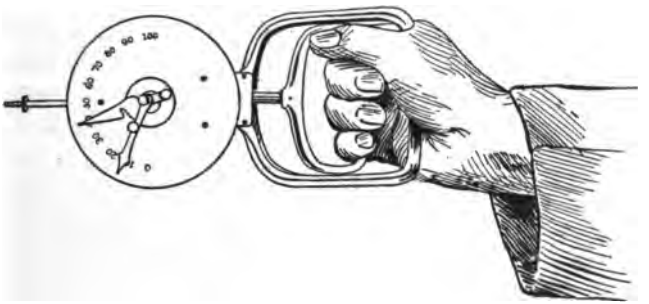
Height was measured by means of an adaptation of the Bertillion stadiometer. The heels of the shoes were calipered and the height of the shoe heels taken from the gross height gave the net height. This, upon trial, proved almost identical with the height when taken without shoes. The results of the compilation of height standing and height sitting will be found in Table I. This growth in stature has been graphically represented in Chart I. The scale at the right of the chart will assist in making a rough translation from the French to the English system of measurement. It will be noted that the average girl is shorter than the average boy when they enter the kindergarten, but just before reaching eleven years of age, owing to a slackening of the boy's rate of growth and an acceleration of the girl's, the average girl becomes taller than the average boy and remains taller till they reach the age of fifteen years. At this period the girls seem to be exhausted in the race, and the boys surpass the girls in height and continue to increase the difference in stature for a number of years.

As in height standing, so in height sitting, when the pupils enter the kindergarten the average boy is slightly taller when seated than the average girl, but just before attaining the age of eleven years the average girl surpasses the average boy in height sitting. This again seems due as much to a retardation in the boy's rate of growth as to an acceleration in the girl's rate of growth. The average girl continues taller when seated than the average boy till nearly sixteen years, or almost a year longer than her height standing exceeds the height standing of the average boy. This shows that the more rapid growth of the boy at this age is chiefly in the lower extremities rather than in the trunk. This great change in the proportions of the body will be readily seen if one looks at the chart as a whole, the distance from the base line to the curve of height sitting representing the length of the trunk, and the distance from the curve of height sitting to the curve of height standing representing the length of the lower extremities.

GROWTH IN WEIGHT.

As we found in stature so we found in weight that the average boy exceeds the average girl during the early years of school life. During the three years from twelve to fifteen the average girl is heavier than the average boy. Soon after fifteen is reached the boy surpasses the girl in weight and he continues to increase in weight more rapidly than she does for a number of years. It will be noted that the average girl surpasses the average boy in weight at about a year later than her stature exceeds his. The curves and tables of weight and height show that the girls continue to increase in weight for a longer period than they increase in height.

FIG. 2.



ADJUSTABLE DYNAMOMETER.

THE DEVELOPMENT OF STRENGTH.

Strength of grip was tested at first by an ordinary two-spring dynamometer, but an attempt to test the young children with this instrument proved that it was entirely unsuited to the size of their hands. Those with the smallest hands were forced to use a different set of phalanges from those which the adult would use on the same instrument. Again, it was found that the adult could make his best record only when the instrument was suited to the size of his hand. For this reason we were forced to devise a new dynamometer which could be adjusted to the size of the hand. This new adjustable grip dynamometer is represented in Fig. 2. It is set by changing the distance between the bars of the inner and outer stirrups. This is accomplished by whirling the inner

stirrup, a screw thread passing through a nut below the dial, causing the protrusion or withdrawal of the stem of the stirrup. A distance between the bars corresponding to about one-half of the distance from the place where the thumb joins the hand to the end of the fingers, was found best suited to most hands.

Each pupil was given several trials of strength and the best result obtainable was recorded. The curves of the strength of grip have been plotted on the same chart with weight, the better to show the relation of the development of strength and growth in weight. It will be seen from Table I. and Chart II. that the boys surpass the girls in strength at all ages; even in the kindergarten the average boy is stronger in his left hand than the average girl is in her right hand, and during the early years of adolescence this differentiation of the sexes becomes very striking. These facts were shown in Dr. Christopher's report and have been fully confirmed by the compilation from the larger numbers. The curve representing the strength of the boy's left hand runs nearly parallel to the curve representing his growth in weight, and in the earlier years of adolescence the curve representing the strength of the right hand gradually approaches the curve of weight. With the girls the lines representing strength and weight gradually become farther and farther apart.

DEVELOPMENT OF VITAL CAPACITY.

The term vital capacity is used here to signify the amount of air that a person can expire after a forced inspiration.

Vital capacity was tested by means of a wet spirometer. In this test, as in the test of strength, the child was allowed repeated trials until he fell short of his previous efforts and the best mark attained was recorded. The boys show greater breathing capacity from the first, the difference becoming marked during adolescence. The great breathing capacities of the boys who were in training for foot ball and the girls who played basket ball were in strong contrast with those who took little physical exercise, which suggests that vital capacity increases and decreases with the amount

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of one's activity, and so, in connection with size, is an index of the rate of metabolism.

THE DEVELOPMENT OF ENDURANCE.

A modification of Mosso's ergograph made possible the study of endurance and fatigue. This instrument gives a graphic record and a measure of the work done under certain fixed conditions by a single group of muscles. The apparatus consists of two parts—a fixing board and a carriage with tracing apparatus mounted on a suitable frame. The arm is fastened firmly to the fixing board allowing free movement to only the middle finger of the right hand. To this finger a cord is fastened which, passing to the carriage and over a pully at the end of the stand, is attached to a weight. In each case in these tests this weight was seven per cent of the weight of the individual. In flexing the finger the weight is lifted and on extending the finger the weight returns to its original place. A pen attached to the carriage and resting upon a kymograph, traces the movement thus made upon paper fastened to the revolving cylinder of the kymograph, and a moving tape line measures the distance which the weight has been lifted. This distance, multiplied by the weight, gives the amount of work done. By keeping time with the beating of a metronome these flexions and extensions of the finger are made at regular intervals, so that in ninety seconds, the time employed in each test, the weight would be lifted forty-five times. In operating the ergograph loaded thus with seven per cent of the gross weight of the individual, it was found that at some period between ninety and one hundred and fifty seconds such fatigue was usually produced as to render it impossible to move the weight at all. By limiting the work to ninety seconds a point was reached at which the strongest pupils would begin to show fatigue, and only the weakest and very obese pupils became entirely exhausted. Chart IV. and Table I. show the development of endurance as shown by the power to do work on the ergograph. From this chart it appears that boys have greater endurance than girls at all ages, and during adolescence the differentiation of the sexes becomes very striking.

The charts of endurance and vital capacity bear a decided resemblance to each other. The comparison of the records an individual makes in endurance and vital capacity seems to show that they usually develop together.

DISTRIBUTION INTO PERCENTILE GROUPS.

Table V. gives the distribution of the data, from the measurements, into percentile groups. Thus, of the four-year-old boys the shortest one measured was eighty-six centimeters in height, ten per cent of the boys were less than ninety-six centimeters tall, twenty-five per cent were below ninety-eight centimeters, seventy-five per cent below one hundred and four centimeters, ninety per cent below one hundred and seven centimeters, and the tallest four-year-old boy was one hundred and sixteen centimeters in height. It has been pointed out by W. Townsend Porter that this form of grouping affords a means of comparing the growth of the small and the large children. The criticism has been made that there is no assurance that a child who is small at one age is certain to be among the small pupils when he reaches another age. While children undoubtedly do pass at times from one group to another, still there is much reason to believe that Porter in the main is right. The percentile grouping is important here as showing the degree of homogeneity of the data collected. In this connection I would call attention to the variation in power among individuals during early adolescence.

Chart V. is based on the percentiles of weight. It shows that the pubescent superiority of girls over boys occurs much earlier and continues for a longer period in the higher percentile groups than in the lower ones. This is in striking confirmation of Porter's compilations.

CHART V.

Weight of pupils Distributed into Percentile Groups. The Dotted Lines Represent the Girls; the Solid Lines the Boys.

Based on Data in Table V.

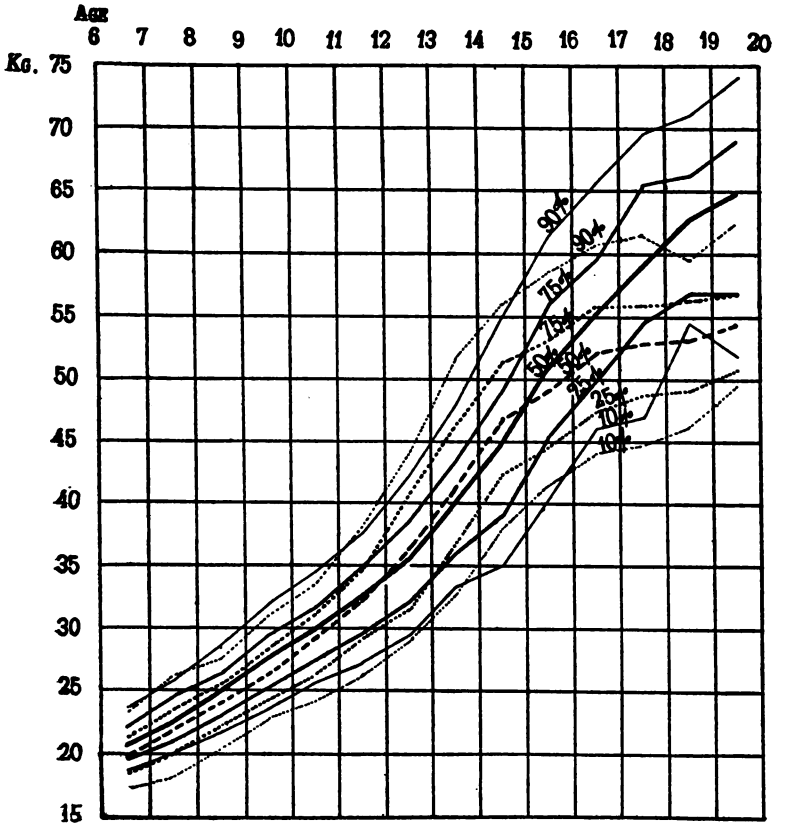


TABLE V. DISTRIBUTION INTO PERCENTILE GROUPS—Height.

BOYS.

AGE.	Minimum. cm.	10 Per Cent. cm.	25 Per Cent. cm.	75 Per Cent. cm.	90 Per Cent. cm.	Maximum. cm.
4	86	96	98	104	107	116
5	96	103	104	110.5	113.5	118
6	101	107	110	116	119.5	125
7	103	112	115	121.5	124.5	132
8	109	116.5	120	127	130	138
9	107	121	125	133	136.5	146
10	116	125.5	129	137.5	141.5	147
11	121	129	133	141	145	150
12	125	132.5	137	146	150.5	164
13	131	140	143.5	154	159	168
14	130	143.5	148.5	160	167.5	178
15	132	151	155.5	166.5	171.5	179
16	142	155.5	161.5	172.5	175.5	185
17	137	160.5	165.5	174	178.5	189
18	161	166.5	168	177	181.5	183
19	148	163	165.5	178	184	197

GIRLS.

4	92	96	98	104	106	110
5	93	100	102	111	114	118
6	95	106.5	109.5	116	118.5	128
7	103	111	114.5	121.5	124.5	133
8	105	116	119	126·5	129	140
9	115	120.5	124	132	135.5	143
10	115	125	128.5	136	140	147
11	119	129.5	134	142.5	146.5	155
12	121	134	139	149	153.5	163
13	129	140.5	145	155	159	170
14	126	147.5	151.5	159.5	163	169
15	140	150	153	160	163.5	172
16	144	150.5	154.5	162	165.5	177
17	144	152	155	162	165.5	177
18	137	151.5	155	162.5	166	176
19	143	152	156	163	167	169

DISTRIBUTION INTO PERCENTILE GROUPS—Weight.

BOYS.

AGE.	Minimum. Kg.	10 Per Cent. Kg.	25 Per Cent. Kg.	75 Per Cent. Kg.	90 Per Cent. Kg.	Maximum. Kg.
4	12	14.75	15.5	18	20.25	21
5	13	16.25	17	19.5	21	26
6	15	18.5	19.5	22.25	23.75	27
7	17	20	21	24.5	25.75	32
8	17	21.75	23	26.5	28.75	62
9	20	23.5	25.25	29.5	32	38
10	19	25.75	27.5	31.75	34.5	50
11	23	27.25	29.5	35	37.75	49
12	25	29.5	32.25	38.25	42.25	54
13	28	33.5	36	43.5	48	72
14	29	35	39	49	55	68
15	30	40.5	45.5	56	61.5	97
16	34	46	50	59.5	65.5	105
17	34	47	54.5	65.5	69.5	81
18	45	54.5	57	66	71	83
19	47	52	57	69	74	98

GIRLS.

4	12	14	15.5	17.5	19.25	21
5	13	15.25	16.5	19.25	21.25	23
6	13	17	18.25	21.5	23.25	27
7	15	18.25	20	23.5	26	31
8	17	20.5	22	25.5	27.5	35
9	19	22.75	24	28.5	31	41
10	19	24	26	31.25	33.5	50
11	21	26.5	29	34.75	38	50
12	21	29	31.75	40.5	44	60
13	24	33	36.5	46.5	53	60
14	28	38	42.5	51.75	56	74
15	30	41.5	44.5	53	56.25	81
16	33	44	47.5	56	60.75	91
17	38	44.5	48.25	56	61.5	75
18	35	46.25	49	56.5	59.5	80
19	38	49.5	51	57	62.5	88
20	30	46	48.5	59.5	66	71

DISTRIBUTION INTO PERCENTILE GROUPS—Right Hand Grip.

BOYS.

AGE.	Minimum. Kg.	10 Per Cent. Kg.	25 Per Cent. Kg.	75 Per Cent. Kg.	90 Per Cent. Kg.	Maximum. Kg.
4	3	3.25	4	7.25	9	10.50
5	4	5.25	6	9.75	10.25	12
6	7	8.50	9.25	11.50	12.50	16
7	5	9.25	10.25	13.25	14.50	27
8	6	10	11.25	15.25	17.50	24
9	8	11.25	13.25	18.25	20.50	30
10	10	13.25	15.25	20.50	23.75	33
11	11	15.50	17.50	23	25.50	31
12	11	17.25	20	26	29	37
13	17	20.25	22.25	30.50	34.25	62
14	15	22	25	35.75	40.75	51
15	19.50	27	30.25	42	47.50	56
16	21	32.50	36.50	47.50	51.50	75
17	20	39	42	53.50	59	73
18	36	43.50	46.25	58	63	71
19	43	46.50	48	62	68	77
20	40	51	52	57.50	59	59

GIRLS.

4	3	4	4.50	7	8.75	9
5	3	4.50	5.50	8.25	10	12
6	4	7	8.50	10.50	12	14
7	5	9	10	12.25	13.75	16
8	6	9	10.25	13.50	15.25	18
9	8	10.50	12.25	15.75	18.25	24
10	9	11.50	13	18	20.50	32
11	8	13.25	15.25	20.50	23	27
12	10	15.25	17.50	23.50	27.50	35
13	11	18	20.25	27.50	30.75	45
14	14.50	20	22.50	31	33.50	38
15	16.50	22	25	31.50	34.50	47
16	18	23.50	26.50	32.50	36	48
17	18	24	26.50	33	37	45
18	22	24.50	27	32.50	36.25	46
19	20	25	27.50	33.50	36.50	39
20	21	26	28.50	34	35.50	36

DISTRIBUTION INTO PERCENTILE GROUPS—Vital Capacity.

BOYS.

AGE.	Minimum. Cu. cm.	10 Per Cent. Cu. cm.	25 Per Cent. Cu. cm.	75 Per Cent. Cu. cm.	90 Per Cent. Cu. cm.	Maximum. Cu. cm.
4	500	625	675	825	950	1050
5	500	775	850	1025	1150	1250
6	700	925	1000	1225	1325	1600
7	700	1025	1150	1375	1475	1800
8	800	1150	1250	1575	1750	2100
9	950	1300	1400	1750	1925	2200
10	900	1350	1450	1850	2050	2700
11	1100	1475	1600	2025	2200	3000
12	1150	1575	1750	2200	2400	3100
13	1600	1850	2000	2450	2800	4200
14	1100	1900	2175	2900	3350	4000
15	1400	2250	2450	3300	3575	4500
16	2000	2550	2950	3800	4300	5100
17	1800	2900	3200	4000	4350	5000
18	2400	3225	3425	4175	4700	5000
19	3000	3100	3500	4200	4800	5600
20	2200	2100	3300	4600	5000	5100

GIRLS.

4	600	675	725	825	850	900
5	600	725	800	975	1025	1100
6	600	800	900	1175	1300	1400
7	750	925	1000	1250	1350	1600
8	700	1000	1125	1350	1450	1800
9	900	1125	1225	1500	1650	2100
10	900	1225	1325	1600	1800	2100
11	1000	1325	1450	1800	1950	2300
12	800	1400	1550	1975	2150	3000
13	1100	1600	1750	2175	2400	3000
14	1350	1700	1925	2350	2675	3100
15	1450	1850	2000	2450	2675	3400
16	1350	1925	2100	2550	2750	3600
17	1250	1900	2075	2550	2800	3300
18	1500	1950	2150	2600	2800	3600
19	1700	2000	2200	2700	3000	3300
20	1300	1900	2200	2700	2825	2900

DISTRIBUTION INTO PERCENTILE GROUPS—Ergograph.

BOYS.

AGE.	Minimum. kg.-cm.	10 Per Cent. kg.-cm.	25 Per Cent. kg.-cm.	75 Per Cent. kg.-cm.	90 Per Cent. kg.-cm.	Maximum. kg.-cm.
5	50	52.5	55	100	130	150
6	30	62.5	77.5	127.5	150	230
7	40	92.50	115	165	190	280
8	40	110	135	200	227.5	300
9	50	140	167.5	242.5	287.5	390
10	110	162.5	190	272.5	315	520
11	110	190	222.5	305	365	490
12	100	202.5	242.5	347.5	402.5	580
13	130	230	285	405	490	880
14	160	265	332.5	510	585	880
15	150	320	390	615	745	1040
16	260	410	470	680	800	1320
17	230	450	545	770	855	1110
18	380	560	600	790	905	1010
19	390	520	610	850	1040	1140

GIRLS.

5	20	30	45	70	90	100
6	30	60	75	117.5	142.5	200
7	40	75	95	145	170	280
8	30	90	112	170	195	280
9	50	115	137.5	202.5	230	430
10	40	125	155	225	260	600
11	70	150	175	260	305	390
12	70	165	195	285	350	650
13	80	185	225	355	430	570
14	90	215	227.5	405	480	660
15	100	230	290	415	480	690
16	120	232.5	305	442.5	530	840
17	150	230	292.5	430	520	640
18	130	240	300	450	510	820
19	160	270	340	480	575	870

THE RATE OF ANNUAL INCREASE IN GROWTH AND DEVELOPMENT.

Table VI. shows separately for each sex and for each of the physical measurements taken the following points: First, the special measurement under consideration at the beginning of each year, as shown in the table of exact birthday norms. Second, the increase in that measurement found at the beginning of the next year, or the increment during that year. Third, the per cent that this increment is of the measurement at the beginning of the year during which it has occurred.

The per cents of gain in height, weight, strength, endurance and vital capacity are represented in Charts VI. and VII. The study of these charts and tables leads to some interesting and important considerations. Noting first the chart relating to the annual rate of gain in height, it is seen that the general trend of this rate of increase is downward. This general trend is broken in both sexes by a rise, which in girls commences at ten and ends at sixteen, and in boys commences at twelve and ends at seventeen. The summits of these rises are from twelve to fourteen in girls and from thirteen to sixteen in boys. The curve showing the rate of gain in weight shows a similar rise in both sexes with maxima at the same ages as in the case of height. The superiority of girls over boys in gain in height and weight at this period of life is also shown. When the curves of the increments of the strength of grip of the right hand, vital capacity and endurance

are observed, it is seen that there is a similar increase at the same ages. The period of the superiority of girls over boys in rate of increase in these latter measurements, all of which involve the factor of physical power, which is less at all ages in girls than in boys, is not so great nor so long maintained as in the case of height and weight. However, the finer differences in rate of growth and development between the sexes are not of special import to us at present. The great feature for consideration is this: There is an exaltation of life processes at the pubescent period which finds its expression not only in an increased rate of growth, but also in the development of physical power.

Education has as its basis the bringing about of bodily changes, especially the modification of the central nervous system. The period of growth of any organ is the period of its plasticity. Although this is not the period of most rapid increase in weight of the nervous system, the rapid development of physical power would in itself indicate that it is a period of nervous change. The question may now be asked: Is this pubescent exaltation, shown so markedly in the physical elements of child life, characteristic also of the other features of that life? In other words, is there a corresponding exaltation of the intellectual and emotional features of the child life? It is unquestionably true that at this period the emotions are in a relatively high state of exaltation, and that many neuroses appear, according to the observations of well-trained alienists and neurologists.

It is undoubtedly a period of great plasticity, physical, mental and moral, a period when great changes occur rapidly. The already well-established relationship existing between physical and intellectual life justifies us in believing that at this period the intellectual turmoil is as great as the physical and emotional. It therefore seems to be the period in school life when the child organism is not only most in need of, but most susceptible to, educational influences. It may not follow that it is a time when the greatest amount of intellectual work should be put upon the child, but it certainly is the great period for character formation. At no time in

CHART VI.

Rate of Annual Increase in Stature, Weight, and Strength of Grip.

Based on Data in Table VI.

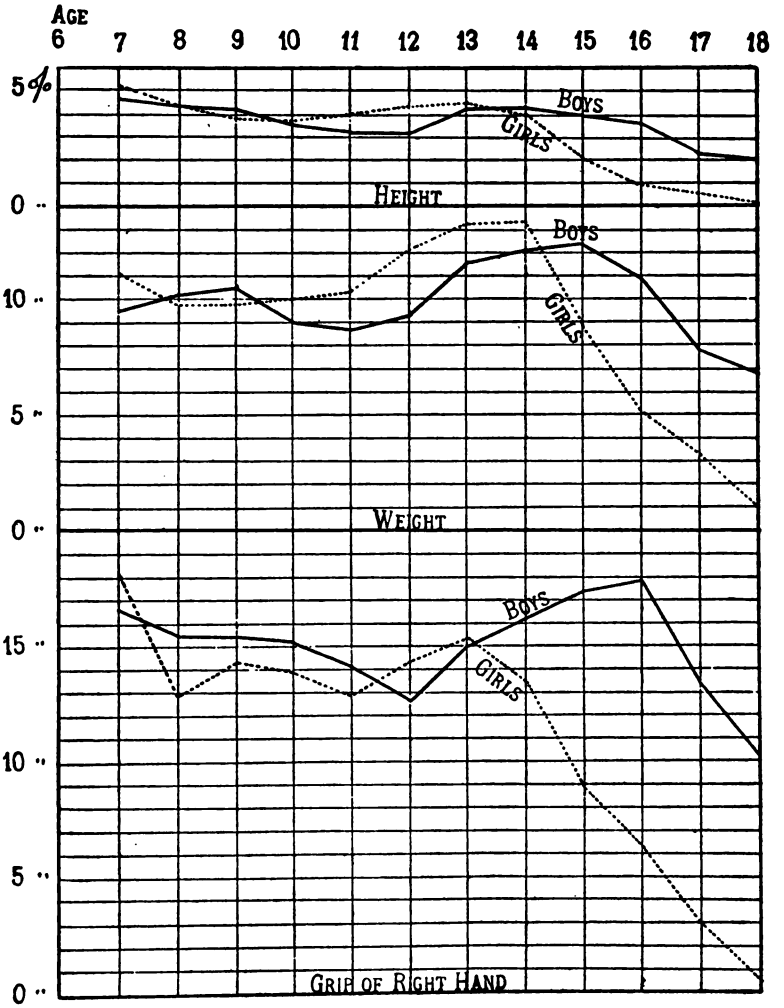
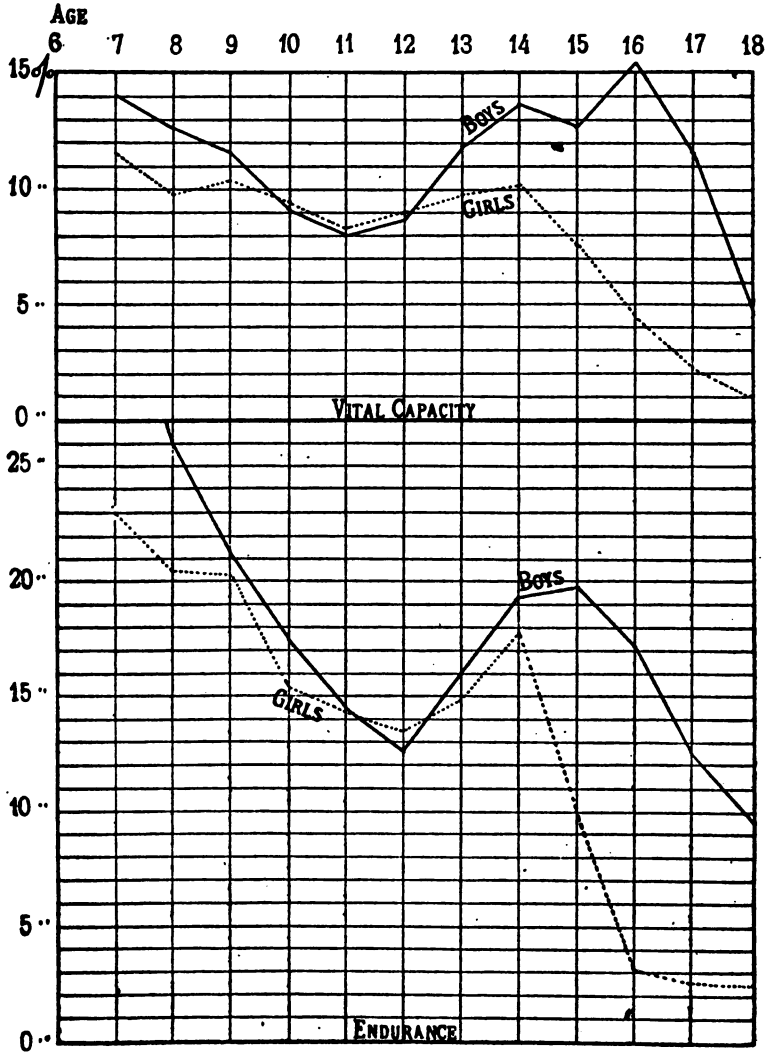


CHART VII.

Rate of Annual Increase in Vital Capacity and Endurance.

Based on Data in Table VI.



the whole school life of the child is judicious, intelligent and sympathetic educational guidance so necessary and so useful.

There is also another feature of the pubescent period of life no less important than the general law of exaltation of physical, mental and moral processes. This feature is the matter of the exceptions to this law. In the report of last year (Charts XIII. to XVII.) there was shown to exist a wide range in all the physical measurements of pupils in the upper grammar grades. In the present report an examination of the tables of percentiles will reveal a similar tendency to extreme range of measurements in the outer percentiles in the pubescent years. The significance of these facts seems to be that in the pubescent period a larger per cent of individuals than usual pass beyond the normal limits of the mass. Furthermore, this passing is in both directions, upward and downward. In other words, while pubescence is a period of great exaltation of the mass of children, it is also a period of high individualization, a period when the weak fail and the able forge to the front. Such a fact is of fundamental importance in education and demands rational and extensive elasticity in the school work at this period of life.

At this period a large number of pupils drop out of school. Is this the fault of the curriculum? The high physical averages found in the following years seems to indicate that the weaker ones are those who leave school at this time. This is a question of great pedagogic and social import and should receive further attention.

The charts seem to show also that a similar but less well marked period of activity is present from the beginning of school life to the age of nine.

TABLE VI.

ANNUAL RATE OF INCREASE—BOYS.

Age.	Height at Beginning of Year. Mm.	Amount of Gain. Mm.	Per Cent of Gain.
6 to 7	1106.9	51.3	4.63
7 to 8	1158.2	51.1	4.40
8 to 9	1209.3	52.1	4.30
9 to 10	1261.4	47.7	3.77
10 to 11	1309.1	42.0	3.20
11 to 12	1351.1	44.3	3.27
12 to 13	1395.4	60.0	4.29
13 to 14	1455.4	63.8	4.39
14 to 15	1519.2	61.5	4.04
15 to 16	1580.7	59.6	3.70
16 to 17	1640.3	38.2	2.32
17 to 18	1678.5	33.8	2.01

Age.	Height Sitting at Beginning of Year. Mm.	Amount of Gain. Mm.	Per Cent of Gain.
6 to 7	624.0	22.7	3.64
7 to 8	646.7	20.8	3.21
8 to 9	667.5	20.4	3.05
9 to 10	687.9	17.7	2.57
10 to 11	705.6	15.4	2.18
11 to 12	721.0	17.0	2.35
12 to 13	738.0	24.4	3.30
13 to 14	762.4	29.7	3.89
14 to 15	792.1	29.7	3.74
15 to 16	821.8	32.5	3.95
16 to 17	854.3	27.3	3.19
17 to 18	881.6	21.4	2.41

Age.	Weight at Beginning of Year. Kg.	Amount of Gain. Kg.	Per Cent of Gain.
6 to 7	19.738	1.875	9.50
7 to 8	21.613	2.204	10.20
8 to 9	23.817	2.519	10.57
9 to 10	26.336	2.371	9.00
10 to 11	28.707	2.516	8.76
11 to 12	31.223	2.928	9.37
12 to 13	34.151	3.933	11.51
13 to 14	38.084	4.612	12.11
14 to 15	42.696	5.297	12.40
15 to 16	47.993	5.245	10.92
16 to 17	53.238	4.146	7.78
17 to 18	57.384	3.904	6.80

Age.	Ergograph at Beginning of Year. Kg.-Cm.	Amount of Gain. Kg.-Cm.	Per Cent of Gain.
6 to 7	87.47	34.65	39.62
7 to 8	122.12	32.05	26.24
8 to 9	154.17	32.90	21.34
9 to 10	187.07	32.96	17.56
10 to 11	220.03	31.83	14.46
11 to 12	251.86	31.97	12.68
12 to 13	283.83	45.38	15.98
13 to 14	329.21	63.41	19.29
14 to 15	392.62	77.51	19.74
15 to 16	470.13	81.09	17.23
16 to 17	551.22	69.42	12.59
17 to 18	620.64	59.09	9.52

Age.	Right Hand Grip at Beginning of Year. Kg.	Amount of Gain. Kg.	Per Cent of Gain.
6 to 7	9.21	1.53	16.61
7 to 8	10.74	1.67	15.55
8 to 9	12.41	1.93	15.55
9 to 10	14.34	2.18	15.20
10 to 11	16.52	2.33	14.10
11 to 12	18.85	2.39	12.67
12 to 13	21.24	3.20	15.06
13 to 14	24.44	3.98	16.28
14 to 15	28.42	4.97	17.44
15 to 16	33.39	5.98	17.90
16 to 17	39.37	5.37	13.38
17 to 18	44.14	4.54	10.14

Age.	Left Hand Grip at Beginning of Year. Kg.	Amount of Gain. Kg.	Per Cent of Gain.
6 to 7	8.48	1.63	19.22
7 to 8	10.11	1.56	15.43
8 to 9	11.67	1.80	15.42
9 to 10	13.47	2.12	15.73
10 to 11	15.59	2.13	13.66
11 to 12	17.72	1.99	11.23
12 to 13	19.71	2.80	14.20
13 to 14	22.51	3.71	12.03
14 to 15	26.22	4.66	17.77
15 to 16	30.88	5.51	17.84
16 to 17	36.39	4.57	12.55
17 to 18	40.96	4.05	9.88

Age.	Vital Capacity at Beginning of Year. Cu. cm.	Amount of Gain. Cu. cm.	Per Cent of Gain.
6 to 7	1023	145	14.17
7 to 8	1168	148	12.67
8 to 9	1316	153	11.62
9 to 10	1469	134	9.12
10 to 11	1603	129	8.04
11 to 12	1732	151	8.71
12 to 13	1883	225	11.95
13 to 14	2108	287	13.61
14 to 15	2395	302	12.60
15 to 16	2697	423	15.68
16 to 17	3120	363	11.63
17 to 18	3483	172	4.93

ANNUAL RATE OF INCREASE—GIRLS.

Age.	Height at Beginning of Year. Mm.	Actual Gain. Mm.	Per cent of Gain.
6 to 7	1096.6	57.1	5.20
7 to 8	1153.7	51.2	4.44
8 to 9	1204.9	47.5	3.94
9 to 10	1252.4	48.3	3.86
10 to 11	1300.7	52.8	4.06
11 to 12	1353.5	59.6	4.40
12 to 13	1413.1	63.7	4.51
13 to 14	1476.8	59.6	4.04
14 to 15	1536.4	31.9	2.08
15 to 16	1568.3	14.7	0.94
16 to 17	1583.0	9.6	0.61
17 to 18	1592.6	1.6	0.10

Age.	Height Sitting at Beginning of Year. Mm.	Actual Gain. Mm.	Per Cent of Gain.
6 to 7	617.0	23.7	3.84
7 to 8	640.7	22.7	3.54
8 to 9	663.4	19.8	2.98
9 to 10	683.2	17.3	2.53
10 to 11	700.5	21.8	3.11
11 to 12	722.3	27.0	3.74
12 to 13	749.3	29.8	3.98
13 to 14	779.1	30.8	3.95
14 to 15	809.9	22.2	2.74
15 to 16	832.1	13.3	1.60
16 to 17	845.4	6.6	0.78
17 to 18	852.0	3.1	0.36

Age.	Weight at Beginning of Year. Kg.	Actual Gain. Kg.	Per Cent of Gain.
6 to 7	18.870	2.104	11.15
7 to 8	20.974	2.036	9.71
8 to 9	23.010	2.247	9.77
9 to 10	25.257	2.538	10.05
10 to 11	27.795	2.867	10.31
11 to 12	30.662	3.711	12.10
12 to 13	34.373	4.601	13.38
13 to 14	38.974	5.245	13.46
14 to 15	44.219	3.942	8.91
15 to 16	48.161	2.491	5.17
16 to 17	50.652	1.734	3.42
17 to 18	52.386	0.537	1.03

Age.	Ergograph at Beginning of Year. Kg.-Cm.	Actual Gain. Kg.-Cm.	Per Cent of Gain.
6 to 7	87.79	20.21	23.02
7 to 8	108.00	22.24	20.59
8 to 9	130.24	26.49	20.34
9 to 10	156.73	24.25	15.47
10 to 11	180.98	25.92	14.32
11 to 12	206.90	28.02	13.55
12 to 13	234.92	34.97	14.89
13 to 14	269.89	48.23	17.87
14 to 15	318.12	31.71	9.97
15 to 16	349.83	11.27	3.22
16 to 17	361.10	9.64	2.67
17 to 18	370.74	9.63	2.60

Age.	Right Hand Grip at Beginning of Year. Kg.	Amount of Gain. Kg.	Per Cent of Gain.
6 to 7	8.36	1.52	18.18
7 to 8	9.88	1.28	12.90
8 to 9	11.16	1.61	14.43
9 to 10	12.77	1.78	13.94
10 to 11	14.65	1.89	12.95
11 to 12	16.54	2.38	14.39
12 to 13	18.92	2.92	15.43
13 to 14	21.84	2.95	13.52
14 to 15	24.79	2.21	8.91
15 to 16	27.00	1.70	6.30
16 to 17	28.70	0.86	3.00
17 to 18	29.56	0.19	0.6

Age.	Left Hand Grip at Beginning of Year. Kg.	Amount of Gain. Kg.	Per Cent of Gain.
6 to 7	7.74	1.50	19.37
7 to 8	9.24	1.24	13.42
8 to 9	10.48	1.49	14.21
9 to 10	11.97	1.75	14.62
10 to 11	13.72	1.80	13.11
11 to 12	15.52	2.26	14.56
12 to 13	17.78	2.61	14.66
13 to 14	20.39	2.53	12.40
14 to 15	22.92	2.00	8.72
15 to 16	24.92	1.64	6.58
16 to 17	26.56	0.87	3.27
17 to 18	27.43	0.23	0.85

Age.	Vital Capacity at Beginning of Year. Cu. cm.	Amount of Gain. Cu. cm.	Per Cent of Gain.
6 to 7	950	111	11.68
7 to 8	1061	104	9.80
8 to 9	1165	121	10.39
9 to 10	1286	123	9.56
10 to 11	1409	117	8.30
11 to 12	1526	138	9.04
12 to 13	1664	163	9.79
13 to 14	1827	187	10.24
14 to 15	2014	154	7.64
15 to 16	2168	98	4.52
16 to 17	2266	53	2.34
17 to 18	2319	24	1.03

THE PHYSICAL CONCOMITANTS OF DULLNESS AND PRECOCITY.

The tests mentioned so far are physical, but mental tests made by the teachers have been going on daily for years and the pupils have been graded on an intellectual basis; and the psychological value of the tests is brought out when we compare the intellectual standing of the pupil with the result of the physical tests. For example, the twelve-year-old pupils are scattered throughout the grades of the elementary schools. Some are found in the second grade, some in the third, some in the fourth, some in the fifth, some in the sixth, some in the seventh and some in the eighth. On compiling the results of the physical tests it is found that the twelve-year-old pupils of the higher grades are decidedly

superior in stature, weight, strength, endurance and vital capacity to those found in the lower grades, as shown by Table VII. and Charts VIII., IX., X., XI. and XII. In Dr. Christopher's preliminary report (pp. 14 to 24) similar tables and charts were given in demonstration of this problem originally set forth in reference to height and weight by W. Townsend Porter. They were based upon the examination of only 138 pupils of the age of twelve and 126 of the age of eleven. The charts here given are based upon the examination of 497 pupils of the age of twelve. The larger number of pupils serves to straighten out the curves and relieve them of much of the irregularity which small numbers are liable to produce. To show how decidedly this parallelism between physical superiority and mental capacity exists throughout school life the pupils have been divided into two groups, those at or above the normal grade for that age, representing the brighter pupils, and those below the normal grade for that age, representing the backward pupils. The normal grade for a given age was found by subtracting six from the age; thus, a pupil of twelve years would normally be found in the sixth grade; if in the fifth or lower grade he would be classed as below grade; if in the sixth, seventh, or eighth he would be classed as at or above grade. The results of this compilation will be seen in Table VIII. and Charts XIII., XIV., XV. and XVI.

That those below grade approach so closely to those at or above grade will be readily understood when we consider that the great majority of all the pupils are but little above or below grade—that is, but little removed from their normal grade.

The falling off of the lines representing those at or above grade in the charts of school standing in the upper ages, and also the decline of the lines of the last years of the charts of norms will naturally be explained on this basis. A few of the very brightest pupils, and so among the very best specimens physically for their age, graduate from the high school as early as sixteen and so leave a lowering of the average of the pupils found in the schools at seventeen and eighteen years and onward.

This demonstration of the physical superiority of the more intelligent pupils does not necessarily imply that small or weak men are always less efficient mentally than are large men, but it does seem to show that one is likely to attain his highest mental development only as he reaches the physical growth and development which nature has marked out for him. It suggests that those in charge of children should see that the normal conditions of growth and development are not interfered with. To the parent it suggests that he should keep wide open the path of growth for the child by securing the best conditions of food, shelter and immunity from disease. Teachers are liable to interfere with the conditions of growth and development by subjecting the pupils to over stimulation, bad air, improper temperatures and too limited an amount of physical exercise. Everywhere it should be borne in mind that childhood should be sacred to growth and development.

TABLE VII. TWELVE-YEAR-OLD PUPILS BY GRADES.

GRADE.	No. Ex.	Av. Age.	Av. Ht. mm.	Av. Wt. kg.	Av. Erg. kg.-cm.	Av. Strength of Grip. Right Hand. kg.	Av. Strength of Grip. Left Hand. kg.	Av. Vital Capacity cu. cm.
II	4	12-3-28	1338	29.513	233	16.75	16.50	1488
III	19	12-5-23	1377	33.592	248.7	20.03	18.55	1732
IV	84	12-5- 2	1403	34.972	271.3	20.22	18.85	1742
V	134	12-5- 9	1422	35.596	268	21.06	19.64	1790
VI	143	12-5-20	1443	36.136	271	21.40	20.12	1887
VII	95	12-6-13	1451	37.150	283	22.31	20.41	1947
VIII	18	12-6-29	1443	38.453	318.6	23.31	21.07	3053

CHART VIII.

Stature and School Standing.

Based on Data in Table VII.

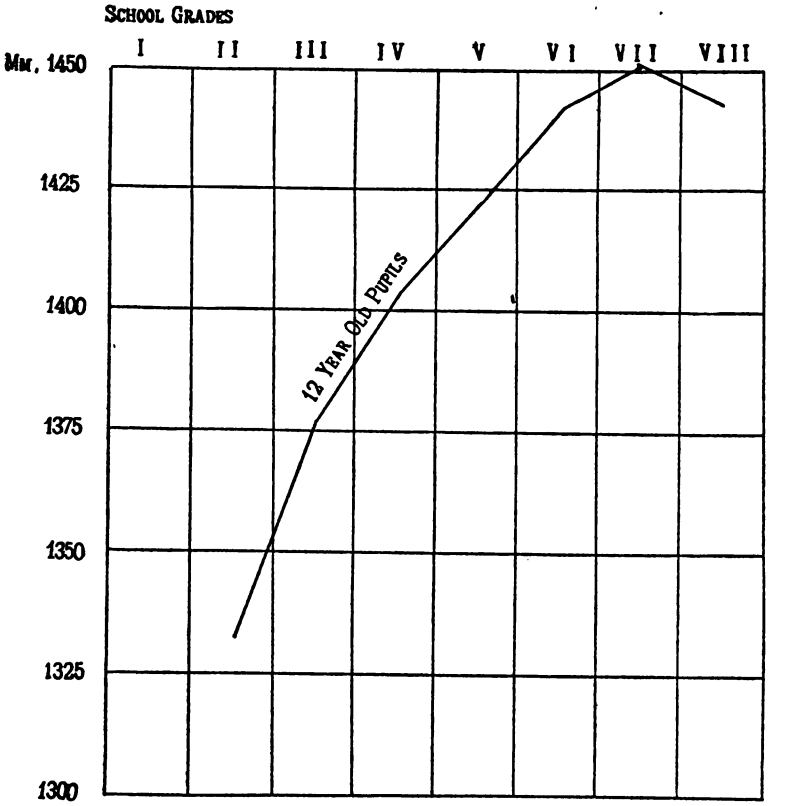


CHART IX.

Weight and School Standing.

Based on Data in Table VII.

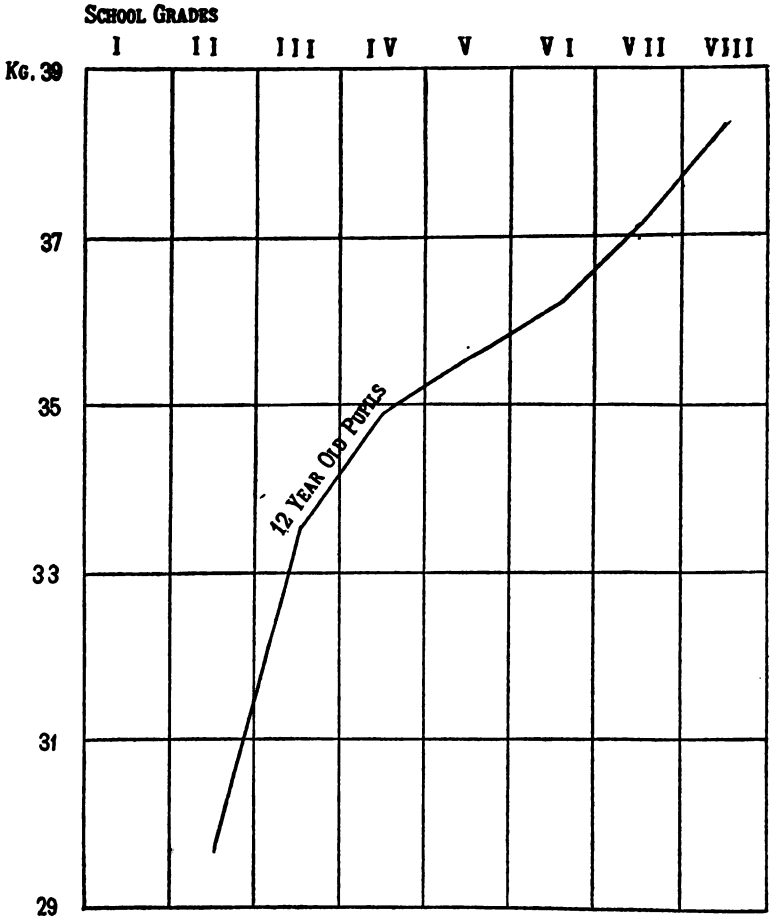


CHART X.

Strength of Grip and School Standing.

Based on Data in Table VII.

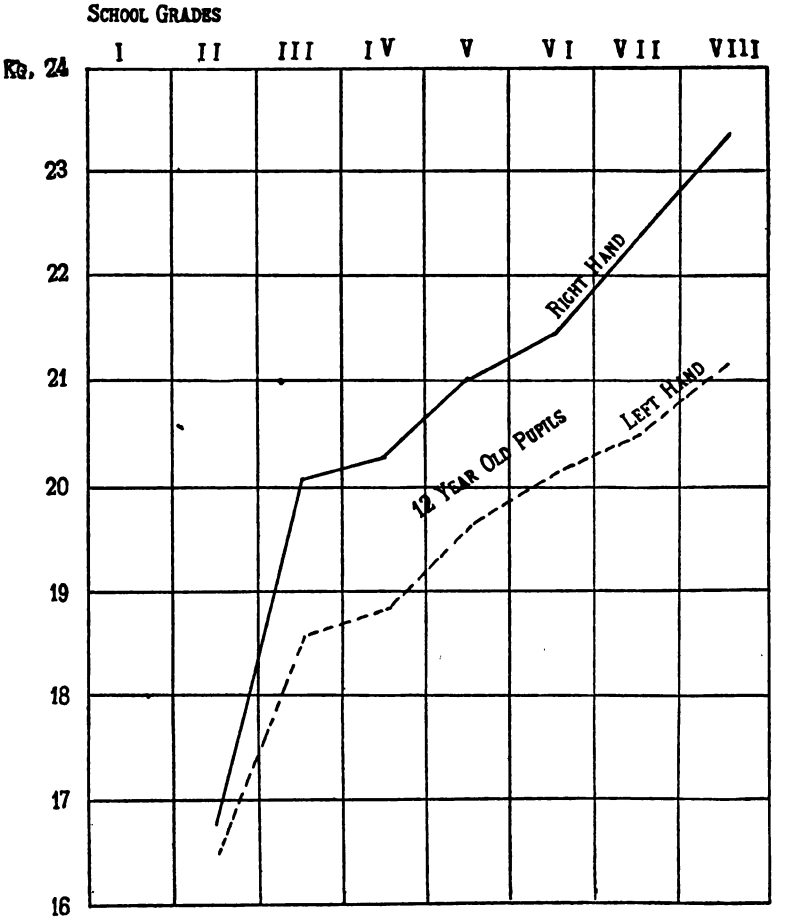


CHART XI.

Endurance and School Standing.

Based on Data in Table VII.

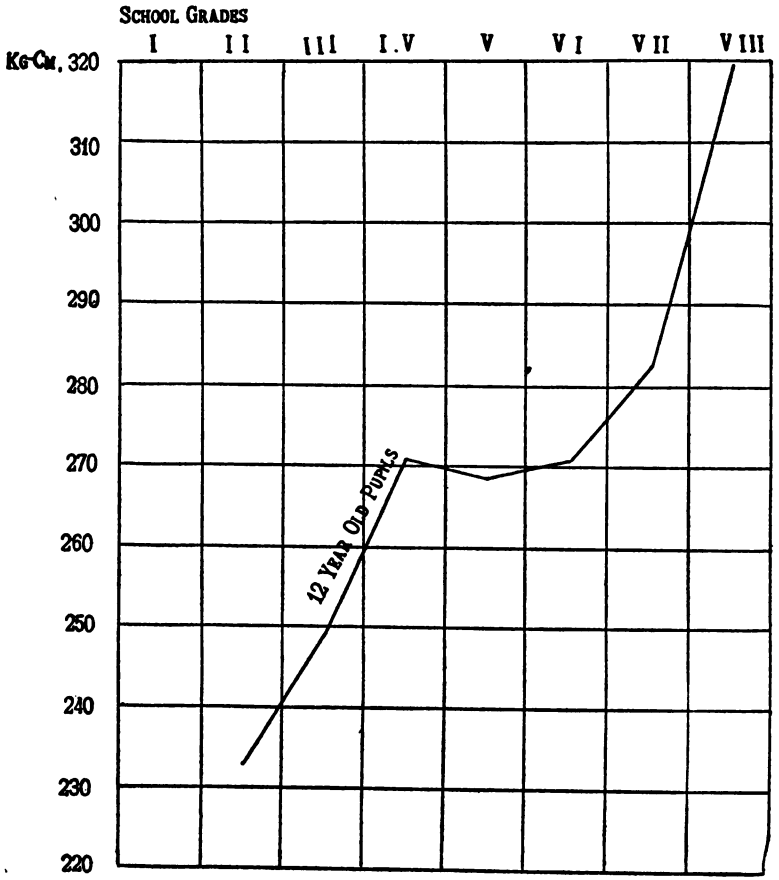


CHART XII.

Vital Capacity and School Standing.

Based on Data in Table VII.

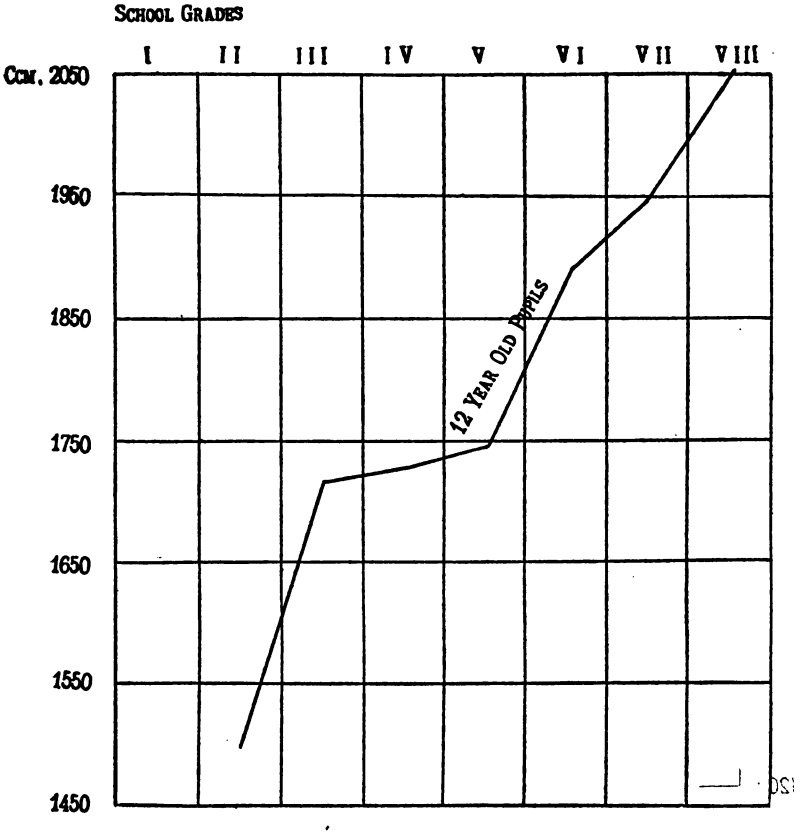


CHART XIII.

Stature and School Standing of Boys.

Based on Data in Tables VIII. and IX.

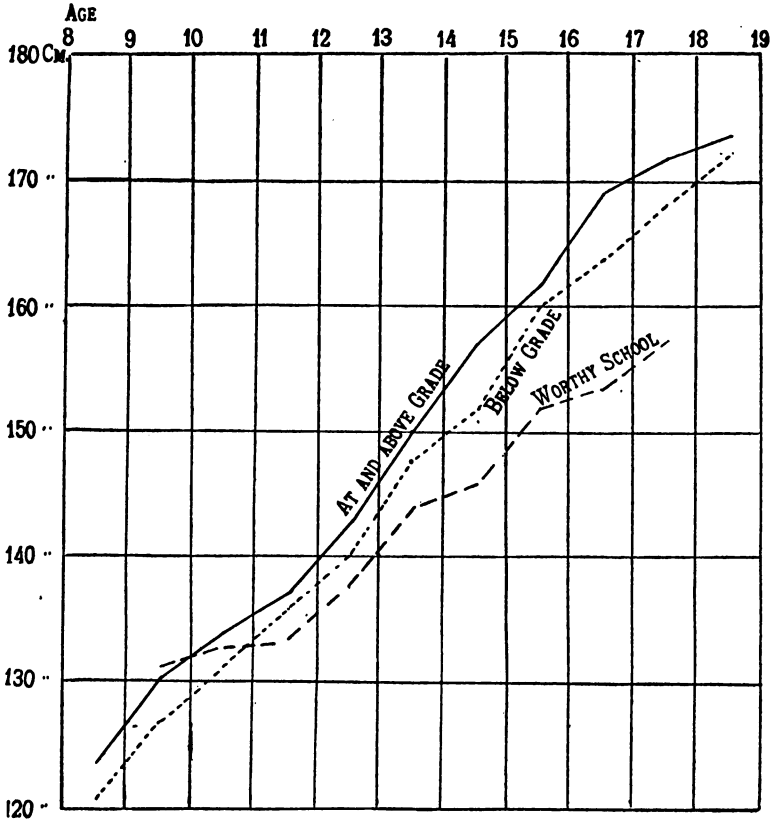


CHART XIV.

Weight and School Standing of Boys.

Based on Data in Tables VIII. and IX.

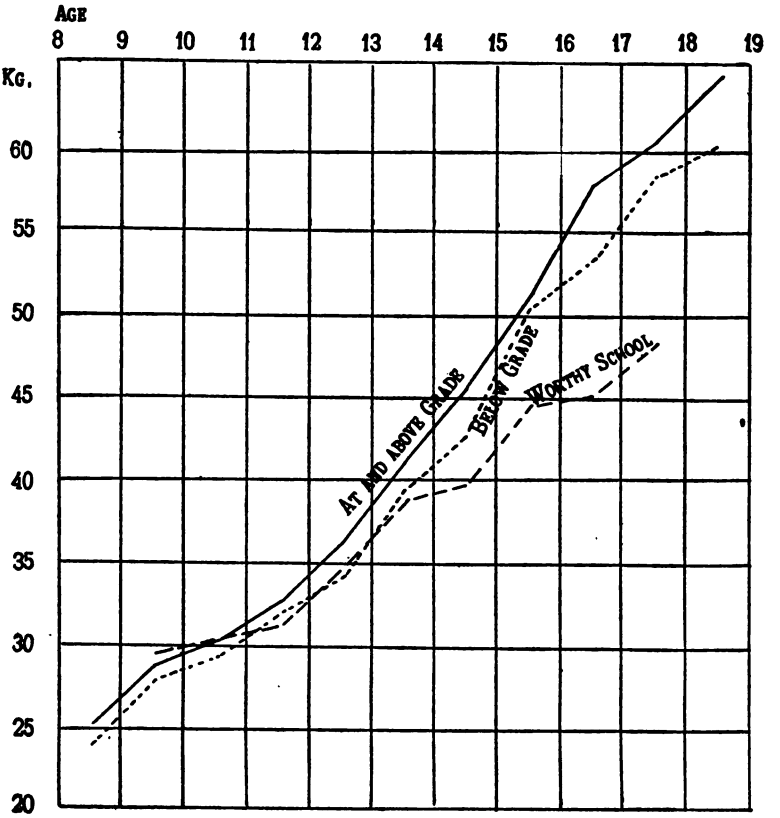


CHART XV.

Vital Capacity and Standing of Boys.

Based on Data in Tables VIII. and IX.

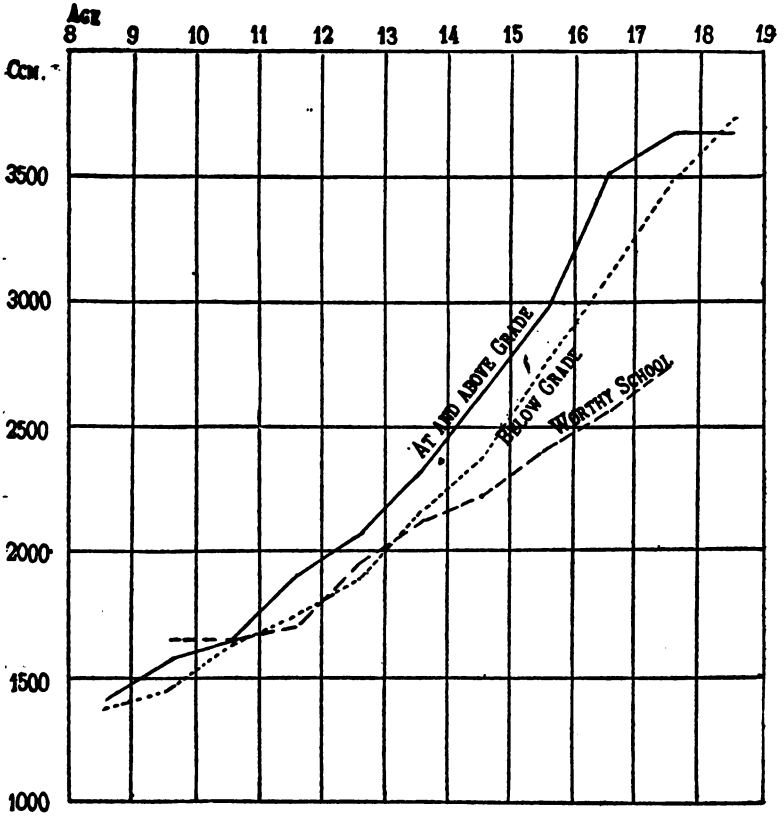


CHART XVI.

Endurance and School Standing of Boys.

Based on Data in Tables VIII. and IX.

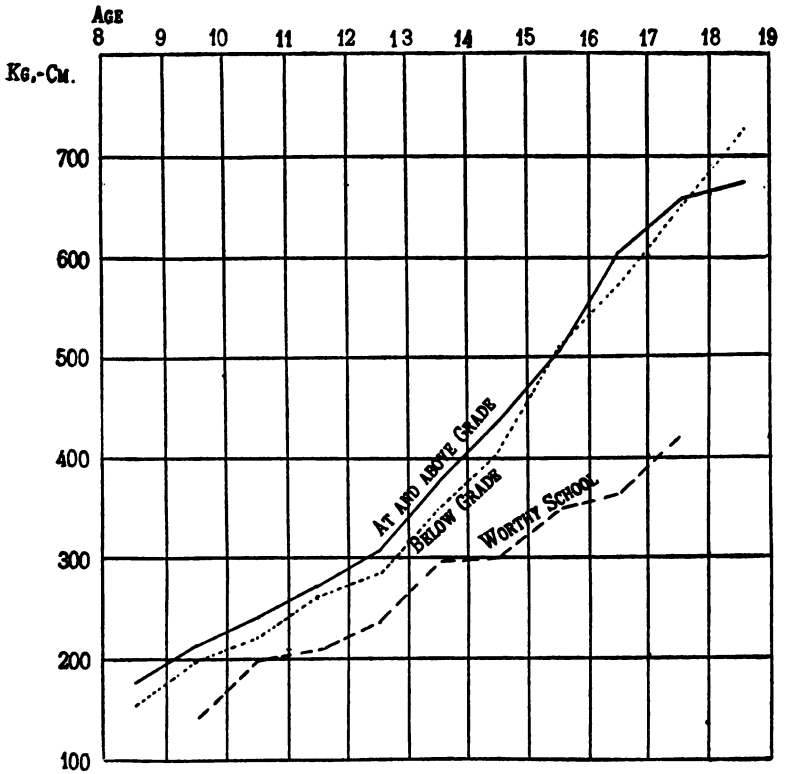


TABLE VIII. PHYSICAL DEVELOPMENT AND SCHOOL STANDING.

BOYS.

Age.	Number Tested.	Average Age.	Height St'nd'g mm.	Height Sittl'g. mm.	Weight. kg.	Ergograph. kg-cm.	Right Grip. kg.	Left Grip. kg.	Vital Cap'city. cu. cm.
8	At and above grade.....210	8-5-25	1288	679	25.286	170.1	13.46	12.49	1395
	Below..... 45	8-4-12	1210	667	23.790	155.2	12.05	11.68	1353
9	At and above grade.....151	9-6-21	1300	702	27.907	209.4	16.12	15.32	1588
	Below..... 77	9-5-2	1264	692	26.787	198.2	14.59	13.66	1472
10	At and above grade.....158	10-6-1	1340	717	30.258	240.5	17.84	16.62	1670
	Below..... 96	10-5-25	1314	707	29.145	225.7	17.42	16.52	1642
11	At and above grade.....125	11-6-23	1376	731	32.814	270.6	20.05	18.64	1828
	Below.....103	11-5-25	1363	727	32.180	264.1	19.82	18.82	1766
12	At and above grade.....130	12-6-10	1436	754	36.843	306.6	23.38	21.44	2063
	Below.....126	12-5-4	1399	740	34.370	286.2	21.38	19.70	1844
13	At and above grade 117	13-6-18	1500	782	41.470	372.4	27.42	24.98	2234
	Below.....113	13-5-1	1475	771	39.040	341.5	25.07	23.38	2163
14	At and above grade.....146	14-6-3	1564	815	46.218	437.3	30.69	28.31	2638
	Below..... 104	14-5-2	1520	793	42.775	404.9	29.13	27.05	2360
15	At and above grade.....125	15-5-26	1622	843	51.394	507.8	36.64	33.54	2978
	Below..... 80	15-5-23	1599	827	50.369	515.9	35.79	33.40	2749
16	At and above grade..... 77	16-5-28	1689	881	58.246	606.8	43.21	39.86	3542
	Below..... 69	16-4-25	1637	859	53.289	575.7	40.90	37.69	3165
17	At and above grade..... 46	17-5-14	1702	897	60.417	654.	47.57	43.60	3646
	Below..... 46	17-5-24	1677	884	58.069	648.7	46.23	41.89	3495
18	At grade..... 23	18-5-27	1737	917	60.971	670.	50.53	44.32	3644
	Below..... 17	18-4-3	1726	911	64.252	723.8	51.41	48.17	3741

GIRLS.

8	At and above grade.....187	8-6-10	1236	677	24.373	147.4	11.89	11.16	1228
	Below..... 45	8-4-26	1195	662	22.424	120.2	10.73	10.08	1113
9	At and above grade.....156	9-6-15	1283	693	26.862	174.9	13.94	12.97	1381
	Below..... 65	9-4-29	1266	688	25.769	163.	13.77	13.12	1308
10	At and above grade.....157	10-6-5	1330	711	29.289	193.4	15.61	14.62	1452
	Below..... 83	10-4-5	1308	704	28.365	183.8	14.91	13.98	1465
11	At and above grade.....121	11-5-25	1390	738	32.651	233.7	18.04	17.16	1611
	Below..... 102	11-5-5	1370	731	31.516	219.3	17.	15.87	1560
12	At and above grade.....132	12-5-27	1456	767	36.655	252.4	20.38	19.12	1763
	Below.....115	12-5-10	1423	756	35.968	244.2	19.77	18.69	1675
13	At and above grade.....154	13-7-3	1526	803	42.673	296.3	23.94	22.10	1939
	Below.....101	13-5-13	1492	788	40.036	291.8	23.08	21.60	1901
14	At and above grade.....226	14-6-20	1572	833	48.060	347.6	26.41	24.22	2160
	Below..... 75	14-5-23	1539	802	44.532	332.9	25.53	23.81	1986
15	At and above grade.....314	15-6-9	1576	842	49.745	360.7	28.09	25.96	2255
	Below..... 65	15-4-24	1564	831	47.413	336.2	27.09	25.07	2083
16	At and above grade.....182	16-6-19	1599	855	53.091	389.3	30.01	27.79	2340
	Below.....172	16-4-23	1584	848	50.773	405.7	28.95	26.80	2267
17	At and above grade.....132	17-5-29	1602	855	53.039	373.4	29.97	27.28	2331
	Below.....119	17-5-1	1590	851	51.663	366.5	29.23	26.97	2274
18	At grade..... 63	18-5-2	1597	856	53.214	387.2	30.15	27.84	2396
	Below 74	18-4-19	1594	858	52.846	376.7	29.57	27.69	2311

TEST OF THE PUPILS OF THE JOHN WORTHY SCHOOL.

Near the close of the school year the apparatus was taken to the John Worthy School, the school in connection with the House of Correction, and the inmates, 284 in number, were examined. Table

IX., and Charts XIII., XIV., XV. and XVI. show the results of these tests, and how these results compare with the averages made by the boys of the other schools. These pupils are found to be inferior in all the principal measurements taken, and this inferiority seems to increase with age.

TABLE IX. COMPARISON OF THE JOHN WORTHY AVERAGES WITH THE NORMS.

AGE.	No.	John Worthy Average.	Normal.	Per Cent John Worthy Is of Normal.
NET HEIGHT.				
		mm.	mm.	
9	2	1312	1289	101.78
10	10	1303	1330	97.97
11	24	1335	1370	97.45
12	54	1378	1418	97.19
13	47	1435	1488	96.44
14	65	1458	1546	94.32
15	51	1518	1613	94.04
16	24	1535	1665	92.19
17	7	1573	1690	93.07
HEIGHT SITTING.				
		mm.	mm.	
9	2	704	699	100.77
10	10	710	713	99.57
11	24	715	729	98.07
12	54	736	747	98.52
13	47	755	777	97.04
14	65	771	806	95.65
15	51	774	837	92.47
16	24	796	871	91.27
17	7	819	891	91.91
WEIGHT.				
		kg.	kg.	
9	2	29.075	27.616	105.28
10	10	30.333	29.837	101.63
11	24	31.527	32.519	96.95
12	54	34.723	35.626	97.47
13	47	38.366	40.276	95.26
14	65	39.287	44.786	87.72
15	51	44.671	50.994	87.60
16	24	45.109	55.219	81.69
17	7	48.079	59.343	81.15
ERGOGRAPHIC WORK.				
		kg.-cm.	kg.-cm.	
9	2	144.4	205.6	70.08
10	10	198.4	235.0	84.51
11	24	211.9	267.7	79.15
12	54	235.4	297.8	79.04
13	47	294.6	359.2	82.01
14	65	300.0	423.8	70.78
15	51	349.2	513.5	68.00
16	24	366.3	584.7	62.64
17	7	422.9	651.4	64.92

VITAL CAPACITY.

		cu. cm.	cu. cm.	
9	2	1675	1549	108.13
10	10	1673	1659	100.81
11	24	1694	1799	94.11
12	54	1953	1956	99.85
13	47	2098	2246	93.40
14	65	2203	2527	87.16
15	51	2409	2858	84.21
16	24	2541	3363	75.14
17	7	2750	3570	77.03

GRIP.

AGE.	Number	RIGHT.			LEFT.		
		John Worthy. kg.	Normal. kg.	John Worthy. Per Cent.	John Worthy. kg.	Normal. kg.	John Worthy Per Cent.
9	2	14.25	15.39	92.59	13.75	14.54	94.56
10	10	15.30	17.68	86.31	14.80	16.66	89.43
11	24	18.10	19.94	91.27	17.20	18.72	91.88
12	54	18.90	22.40	84.37	18.30	20.58	88.92
13	47	22.22	26.26	84.61	20.89	24.23	86.21
14	65	22.70	30.70	73.93	21.85	27.94	78.20
15	54	25.62	36.30	70.57	24.48	33.65	72.74
16	24	27.88	42.12	66.19	27.27	38.82	70.24
17	7	31.20	46.99	66.39	31.43	42.74	73.53

RIGHT-HANDEDNESS.

Educators have long been divided on the question of the desirability of attempting to develop ambidexterity in their pupils. One class maintains that "all want of perfect bilateral symmetry looks away from perfect sanity," that ambidexterity is the ideal condition, both in regard to the perfection of development and utility. The other class maintains that a high development can be given to one hand only, that the left hand plays the most useful part when it aids and supplements the action of the right. Most physical exercises prescribed for pupils from the kindergarten through the high school have aimed at overcoming the tendency to right-handedness, while penmanship and manual training have yielded to this tendency. This question, like most educational questions, can be rightly settled only upon the basis of child-study investigation.

In the absence of any term corresponding to ambidexterity, and meaning unequal ability in the use of the hands without indica-

tion of which hand is the superior, the term unidexterity is suggested.

Reference to Table I. and Chart II. shows that the children on the average are unidextrous, with the right hand superior at the time they enter school, and that the unidexterity increases during the early years of adolescence. It has long been known by those who have made a study of the localization of cerebral function that there is a connection between unidexterity and speech. J. Mark Baldwin, from a study of his children, has discovered a parallelism between the beginning of unidexterity and the beginning of speech in the development of the child. Does not the pubescent increase in unidexterity parallel the change of voice? In his report of last year (page 14 of the reprint) Dr. Christopher intimated that the marked differentiation in the strength of the hands is a pubescent change, but the small number of pupils involved in the examination, and the consequent irregularities in the curves, forbade a definite assertion to that effect. The larger numbers involved in the present discussion justify the definite conclusion that the phenomenon is a true law of child life.

A glance at Table VII. and Chart X. will show that the more advanced of the twelve-year-old pupils are more decidedly unidextrous than are the backward pupils of that age. That this association between decided unidexterity and intellectual power holds good throughout school life will be seen by a reference to Table X. and Chart XVII. The apparent exception of the sixteen-year-old pupils disappears if the records of the left-handed pupils be excluded. The John Worthy boys, too, are more nearly ambidextrous on the average than are even the dull pupils. Among the left-handed pupils at or above grade the average strength of grip of the right hand is 91.8 per cent of the strength of the left. Of the left-handed pupils below grade the strength of the right hand is 94 per cent of that of the left. On the whole, the brightest are more decidedly unidextrous than are the average pupils, the average pupils are more unidextrous than are the dull pupils, and they in turn are more decidedly unidextrous than are the pupils of the John Worthy School.

CHART XVII.

Right-Handedness and School Standing. Per Cent Which the Strength of the Left Hand Is of the Strength of the Right for Pupils at and above Grade, Those below Grade, and the Boys of the John Worthy School.

Based on Data in Table X.

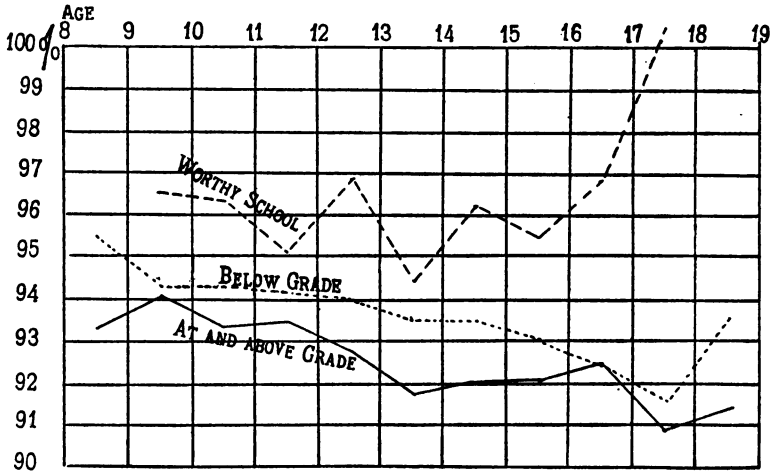


TABLE X. RIGHT-HANDEDNESS AND SCHOOL STANDING.

Age.		Number of Pupils Tested.	Right Hand Grip.	Left Hand Grip.	Per Cent. Left is of Right.
8	At and above grade	397	12.72	11.67	93.31
	Below grade	90	11.39	10.88	95.56
9	At and above grade	307	15.00	14.11	94.06
	Below grade	142	14.22	13.41	94.32
	John Worthy School	2	14.25	13.75	96.49
10	At and above grade	315	16.73	15.63	93.43
	Below grade	179	16.24	15.33	94.40
	John Worthy School	10	15.30	14.80	96.73
11	At and above grade	246	19.06	17.83	93.54
	Below grade	205	18.33	17.27	94.22
	John Worthy School	24	18.10	17.20	95.03
12	At and above grade	202	21.87	20.28	92.73
	Below grade	241	20.35	19.14	94.05
	John Worthy School	54	18.90	18.30	96.83
13	At and above grade	271	25.44	23.34	91.74
	Below grade	214	24.13	22.59	93.60
	John Worthy School	47	22.22	20.89	94.14
14	At and above grade	272	28.06	25.83	92.00
	Below grade	179	27.31	25.55	93.56
	John Worthy School	65	22.70	21.85	96.26
15	At and above grade	439	30.51	28.19	92.06
	Below grade	145	31.89	29.67	93.03
	John Worthy School	51	25.62	24.48	95.55
16	At and above grade	259	33.95	31.40	92.49
	Below grade	241	32.37	29.93	92.46
	John Worthy School	24	27.88	27.27	97.81
17	At and above grade	178	34.56	31.40	90.86
	Below grade	165	33.93	31.09	91.63
	John Worthy School	7	31.20	31 43	100.73
18	At grade	80	34.48	31.50	91.36
	Below grade	97	34.75	32.55	93.65

GROWTH ABNORMALITIES AND MOTOR DEFECTS.

On the back of each card was printed a list of abnormalities of growth and defective movements as follows:

Growth:

- Macrocephalic
- Microcephalic
- Dolichocephalic
- Brachycephalic
- Cranial asymmetry
- Face asymmetrical as to:
  - Forehead
  - Nose
  - Eyes
  - Ears
  - Mouth
- Forehead retreating
  - Narrow
- Palpebral fissures small
- Epicanthis
- Nasal bones sunken
- Superior maxillary small

Movement:

- Quick
- Sluggish
- Restless
- Incoordinated
- General balance relaxed
- Asymmetrical posture
- Head balance asymmetrical
- Lordosis
- Over action of frontals
- Corrugation
- Blinking
- Incoordination of eyes
- Immobility of eyes
- Relaxed obicularis oculi
- Head balance asymmetrical
  - Tense
  - Relaxed

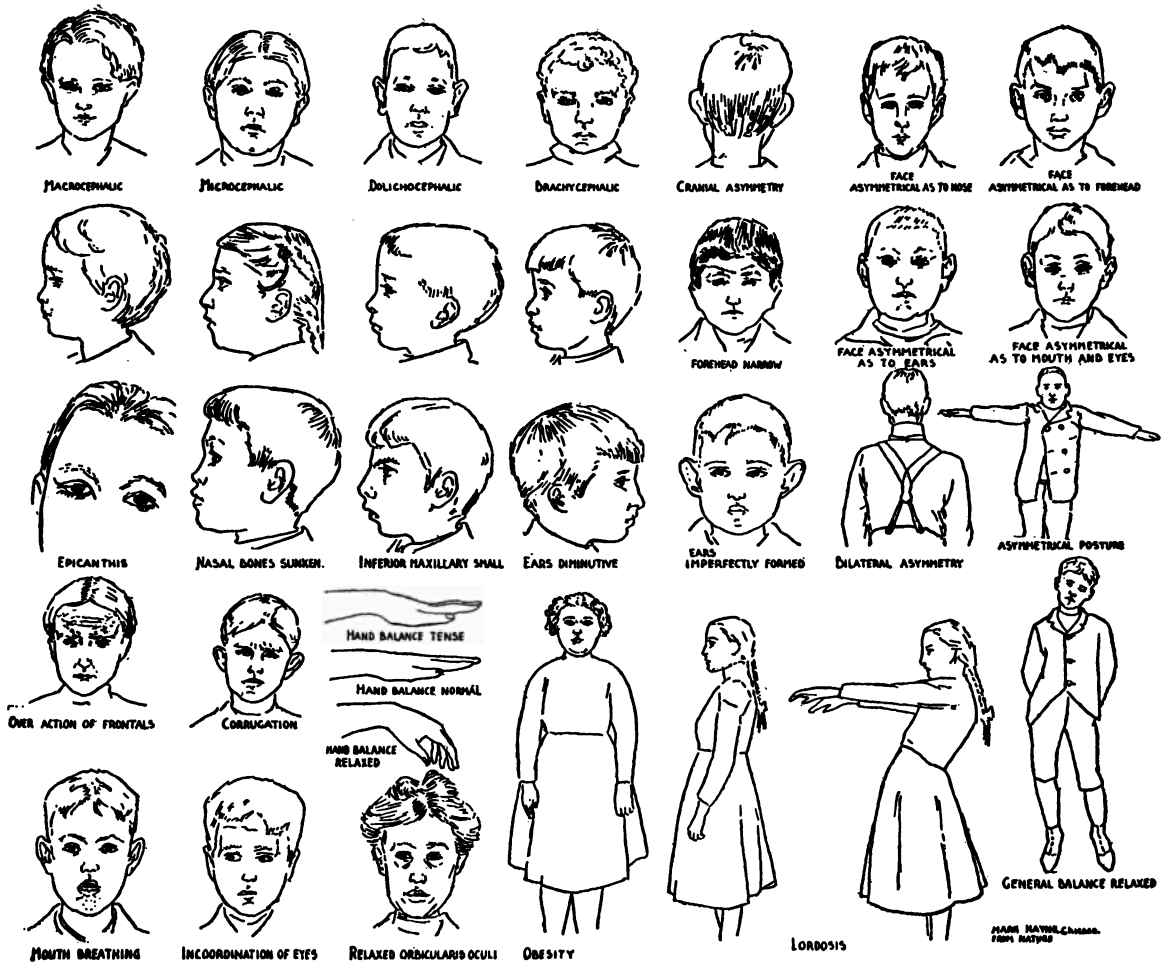

MACROCEPHALIC
MICROCEPHALIC
DOLICHOCEPHALIC
BRACHYCEPHALIC
CRANIAL ASYMMETRY
FACE ASYMMETRICAL AS TO NOSE
FACE ASYMMETRICAL AS TO FOREHEAD
FOREHEAD NARROW
FACE ASYMMETRICAL AS TO EARS
FACE ASYMMETRICAL AS TO MOUTH AND EYES
EPICANTHIS
NASAL BONES SUNKEN.
INFERIOR MAXILLARY SMALL
EARS DIMINUTIVE
EARS IMPERFECTLY FORMED
BILATERAL ASYMMETRY
ASYMMETRICAL POSTURE
OVER ACTION OF FRONTALS
CORRUGATION
HAND BALANCE TENSE
HAND BALANCE NORMAL
HAND BALANCE RELAXED
MOUTH BREATHING
INCOORDINATION OF EYES
RELAXED ORBICULARIS OCULI
OBESITY
LORDOSIS
GENERAL BALANCE RELAXED

FIG. 8.

Inferior maxillary small
Hare lip
Palate cleft
Narrow
High
Asymmetrical
Ears diminutive
Imperfectly formed
Obesity
Bilateral asymmetry
Spinal curvature
Deformed limbs
Crippled
Finger twitches
Blushing
Pallor
Mouth breathing
Defective speech

When the child came in the room to take the tests an observer carefully inspected him and noted the growth and movement abnormalities. A slight abnormality was marked with one X, a more decided by two, a marked abnormality by three and an extreme by four. The results of this inspection are shown in Tables XI. and XII. and in Charts XVIII. and XIX.

It is found that the dull pupils have more of these cranial and facial asymmetries and other growth peculiarities than the bright children. From the study of movements of children it is found that the dull children show more cases of imperfectly controlled movement than are found among the brighter children.

The John Worthy boys far exceed even the dull pupils of the other schools both in the average number of growth abnormalities and in the number of motor defects.

All this forces us to the conclusion that, with children, a high, symmetrical intellectual development is likely to be attained only when there is an approach to physical perfection.

TABLE XI. GROWTH ABNORMALITIES.

Age	8	9	10	11	12	13	14	15	16	17	18
Number examined	212	171	155	131	131	132	163	183	117	77	43
Average number of abnormalities seen in pupils at and above grade	4.6	4.6	4.9	5.1	4.0	3.7	4.1	3.9	3.7	3.7	3.1
Number examined	57	88	118	122	146	132	93	59	134	96	55
Average number of abnormalities seen in pupils below grade	4.9	4.6	5.1	5.5	5.3	5.7	4.3	4.3	4.3	3.6	3.5
Number examined	..	2	10	24	54	47	65	51	24	7	..
Average number of abnormalities seen in pupils of John Worthy School	...	10	7.9	7.9	8.6	9.3	8.9	9.7	9.9	10.3	...

CHART XVIII.

Average Number of Growth Abnormalities Seen in Pupils Who Are at and above Grade, Those below Grade, and Boys of the John Worthy School.

Based on Data in Table XI.

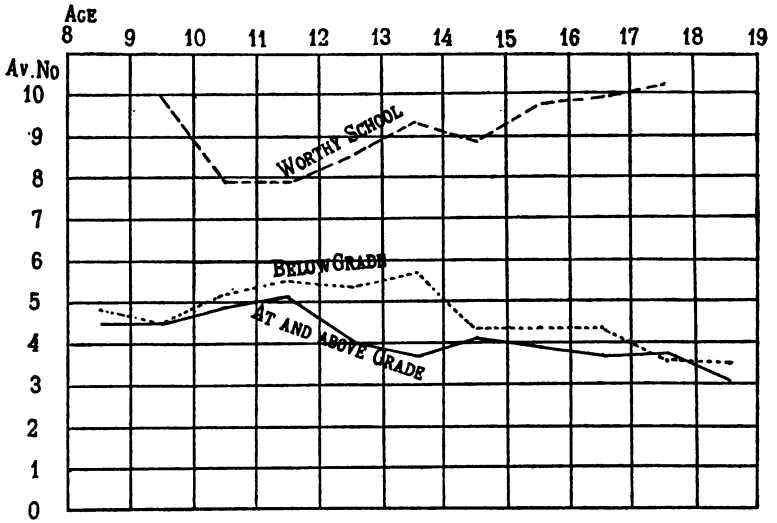


CHART XIX.

Average Number of Motor Defects Seen in Pupils at and above Grade, below Grade, and Boys of the John Worthy School.

Based on Data in Table XII.

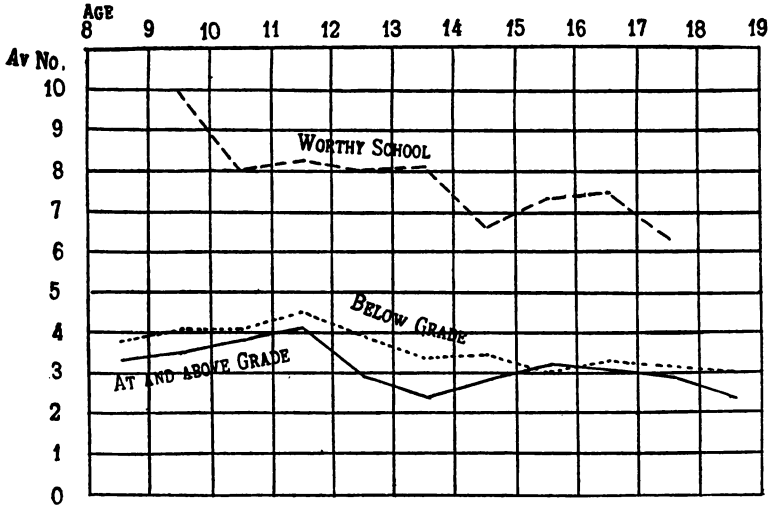


TABLE XII. MOTOR DEFECTS.

Age	8	9	10	11	12	13	14	15	16	17	18
Number examined	212	171	155	131	131	132	168	183	117	77	43
Average number of motor defects seen in pupils at and above grade	3.4	3.6	3.8	4.1	2.9	2.4	2.8	3.2	3.1	2.9	2.4
Number examined	57	88	118	122	146	132	93	59	134	96	55
Average number of motor defects seen in pupils below grade	3.8	4.1	4.1	4.6	3.9	3.3	3.5	3.0	3.3	3.2	3.0
Number examined		2	10	24	54	47	65	51	24	7	..
Average number of motor defects seen in pupils of John Worthy School	..	10.0	8.0	8.2	8.0	8.1	6.67	7 3	7.5	6.3	..

TESTS OF SIGHT.

The sight of the pupils was tested in the Kozminski, Andersen and Tennyson elementary schools and the Englewood and Lake View high schools. This test of visual acuity was made by means of the ordinary Snellen's type, the test cards being selected by Dr. Frank Allport, consulting oculist and aurist to the Department of Child-Study. Well lighted rooms were used for these tests. In testing sight the child was seated in a chair placed twenty feet away from the test chart, and, with the left eye covered, he was asked to begin at the top of the card and read aloud down the card as far as he could. After this was done the right eye was covered and the left eye tested. The last line of which the pupil was able to read the majority of the letters showed his visual acuity for the eye used. Visual acuity was recorded by placing the number representing the normal reading distance of the last line which the pupil was able to read as the denominator and the distance from which it was read (twenty feet) as the numerator of a fraction. Thus, if a child seated twenty feet from the chart could read the majority of the letters of the line normally read at thirty feet, but could not read a majority of the letters of the line normally read at twenty feet, he would be 20-30 in visual acuity of the eye tested.

These tests were made without spectacles where the pupils wore glasses, as the aim was to find the number with subnormal visual acuity for each year.

SCHOOL ROOM – CRIPPLED CHILDREN'S SCHOOL. Madison Street, N. W. Corner Ogden Ave.

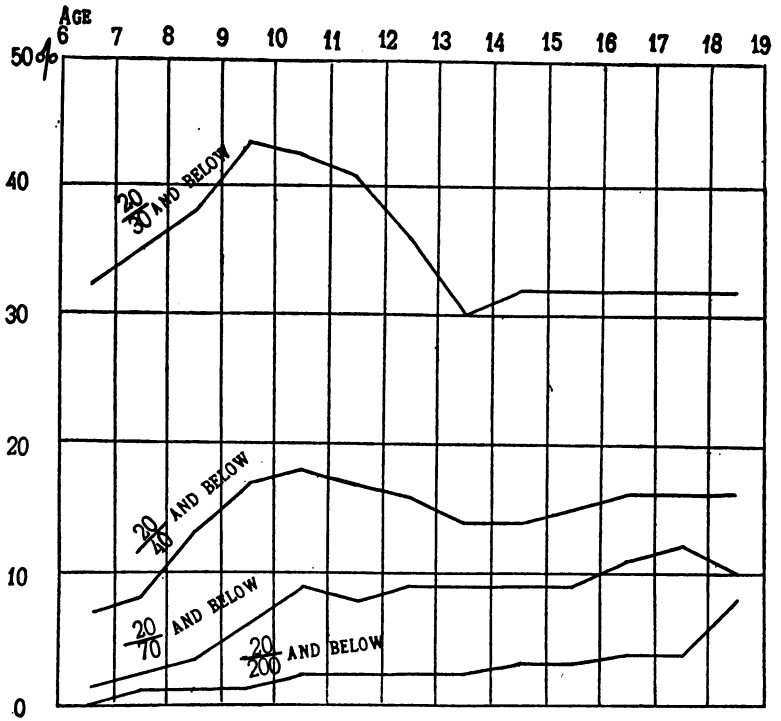
Four thousand seven hundred and sixty-five pupils were tested —2,030 boys, 2,735 girls. Thirty-five per cent of all the pupils tested were found defective—37 per cent of the girls and 32 per cent of the boys; thus 5 per cent more of the girls were found to be defective than the boys. Table XIII. and Chart XX. show something of the results of these tests. Thirty-two per cent of the six-year-old pupils were found subnormal in vision. For the first three years of school life the per cent of those defective rapidly increases, suggesting that the school work of that period is hard on the eyes of the pupils. After the age of nine years is passed the per cent of pupils having eye defects decreases; at first slowly, then more rapidly, until the age of thirteen is passed. This decrease in the per cent of eye defects parallels so closely the period of rapid growth and development that the improvement may be considered a manifestation of the improved health of this period of florid growth. The slight rise at fourteen is probably due to the larger proportion of girls found in the high schools at that and the following years. It will be remembered that girls have a larger per cent of eye defects than boys.

The second curve in Chart XX. is obtained by disregarding the minor defects. It represents those who are 20-40 or below in one or both eyes. The distance between the curve fo 20-30 and that of 20-40 shows that considerably more than one-half of those counted as subnormal in visual acuity are only slightly so. Many of these slighter defects, however, are known to be productive of immediate distress and of serious consequences if neglected. This second curve follows the same general course as the first. It reaches its maximum a lear later, however, and the improvement at the period of rapid growth is decidedly less. The latter part of the curve remaining so much higher than the beginning shows how few recover from these more decided defects. The third curve gives cases where the visual acuity is 20-70 or less in one or both eyes. Starting at about one per cent at six years old the curve reaches its first climax between the tenth and eleventh years and shows only the slightest recovery, practically only cessation of increase, at the period of rapid growth. The lowest curve is hardly so interesting

CHART XX.

School Life and Sight, Showing the Per Cent Defective in Visual Acuity for each Year.

Based on Data in Table XIII.



from a pedagogical standpoint as the others. It includes those having visual acuity of 20-200 and below in one or both eyes. This is almost blindness, and in many cases is due to accident. The curve rises steadily, as one would expect, because the chances of accident increase with age. The changes in the curves at seventeen are due probably to the paucity of numbers

TABLE XIII. SCHOOL LIFE AND SIGHT.

AGE.	No. Tested.	$\frac{5}{6}$ and below.	$\frac{5}{9}$ and below.	$\frac{5}{12}$ and below.	$\frac{5}{18}$ and below.	$\frac{5}{24}$ and below.
6	264	32	7	4	1	0
7	363	35	8	4	2	1
8	351	38	13	9	3	1
9	343	44	17	11	6	1
10	364	43	18	13	9	2
11	385	41	17	13	8	2
12	364	36	16	14	9	2
13	373	30	14	13	9	2
14	450	32	14	13	9	3
15	521	32	15	13	9	3
16	475	32	16	13	11	4
17	339	32	16	14	12	4
18	173	32	16	13	10	8

DEFECTIVE VISION AND SCHOOL STANDING.

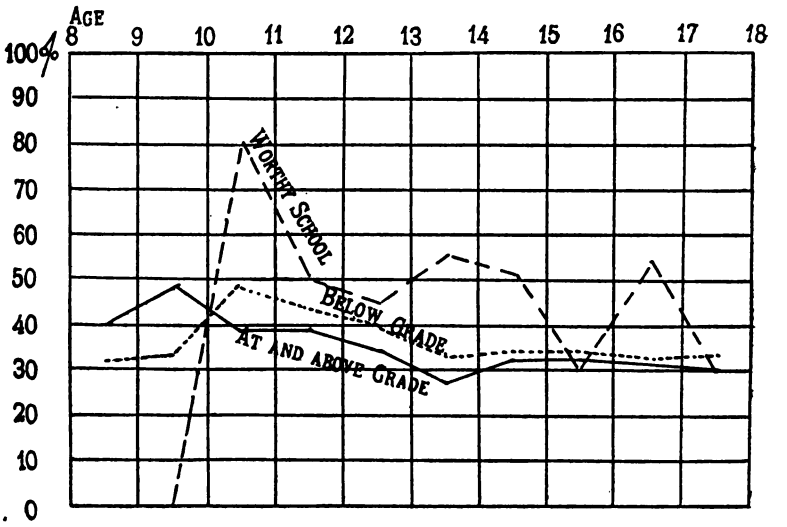
The influence of defective vision on school standing is shown in Table XIV. and Chart XXI. It appears that on the average a smaller per cent of the pupils at and above grade have defective sight than those below grade. The fact that the reverse is true during the first two years led to an investigation which gave quite conclusive evidence that the increase in eye defects during the first years of school life is due, in part at least, to school conditions. It will be seen that eight and nine year old pupils who have made the best advancement have the greater per cent of eye defects. On investigation it was found that the more advanced pupils in this case had, on the whole, started to school younger, and this longer time at school is believed to account for both the advanced standing and the increased number of those who are subnormal in visual acuity.

Forty-eight per cent of the boys of the John Worthy School were subnormal in visual acuity, while but twenty-eight per cent of the boys of the same average age tested in the other schools were thus defective.

CHART XXI.

Defective Vision and School Standing.

Based on Data in Table XIV.



Many of the John Worthy boys had strabismus, hypermetropia and astigmatism, conditions which would induce asthenopia when the eyes were used in close and long application to books, and it is easy to believe that the strain thus set up when an attempt was made to study was a factor in producing dislike for school and subsequent truancy.

TABLE XIV. SCHOOL STANDING AND SIGHT.

AGE.	NUMBER TESTED.		PER CENT. DEFECTIVE.
8	At and above grade	296	40
	Below grade	65	32
9	At and above grade	245	47
	Below grade	98	34
	John Worthy School	2	00
10	At and above grade	220	39
	Below grade	144	48
	John Worthy School	10	80
11	At and above grade	172	39
	Below grade	213	43
	John Worthy School	24	50
12	At and above grade	185	34
	Below grade	179	40
	John Worthy School	54	46
13	At and above grade	206	27
	Below grade	167	33
	John Worthy School	47	55
14	At and above grade	321	32
	Below grade	129	33
	John Worthy School	65	52
15	At and above grade	436	32
	Below grade	85	34
	John Worthy School	51	30
16	At and above grade	256	31
	Below grade	219	32
	John Worthy School	24	54
17	At grade	178	30
	Below grade	161	33
	John Worthy School	7	29

TESTS OF HEARING.

Hearing was tested by means of the audiometer invented by Professor C. E. Seashore of the Iowa State University, and described fully by him in Studies in Psychology, Vol. II., issued from that University. This is a piece of electric apparatus so constructed that the operator can vary the current at will, producing clicks of different degrees of loudness in the telephone receiver held at the subject's ear. The intensities of the current, and hence the intensities of the sound vibrations, are graded arbitrarily along the scale from one to forty. The threshold of hearing is determined

by producing a click loud enough to be heard clearly by the subject and then passing gradually down the scale until the click becomes so slight that the subject cannot hear it. The figures on the scale at the point producing the slightest sound that can be heard are taken to represent the subject's acuteness of hearing. Because the click is made in direct contact with the ear of the subject external noises are less confusing than is the case with most tests of hearing; nevertheless, these sounds do interfere somewhat, and on this account the quietest room in the building was always selected for these tests.

Table XVI. and Chart XXII. are based on tests on 5,706 pupils.

There seems to be no decided sex difference in the matter of hearing. The girls, on the whole, are found to have about one per cent. less of defective ears than the boys. Chart XXII., on Hearing Defects and School Life bears a striking resemblance to the corresponding one on sight in that the number of defects increases during the first few years of school life and then the number gradually decreases. This correspondence suggests that, in part at least, the changes may be due to a common cause.

Charts XXIII. and Table XVI., in reference to Hearing and School standing, show the decided disadvantage at which the child with poor hearing is placed. The pupils of the John Worthy School do not seem to differ strikingly in the number of cases of hearing defects from the pupils in the other schools.

The following table shows the per cent. of pupils who are defective in hearing by the number of points indicated:

TABLE XV.

	Three or More Points below Normal.	Four or More Points below Normal.	Five or More Points below Normal.
With one ear.....	25.3 per cent.	16.8 per cent.	12.2 per cent.
With both ears.....	12.3 per cent.	6.8 per cent.	3.2 per cent.

From this table it appears that there are a large number of pupils whose two ears differ in hearing power. These will be at a decided disadvantage if seated on the wrong side of the room.

CHART XXII.

Hearing Defects and School Life.

Based on Data in Table XVI.

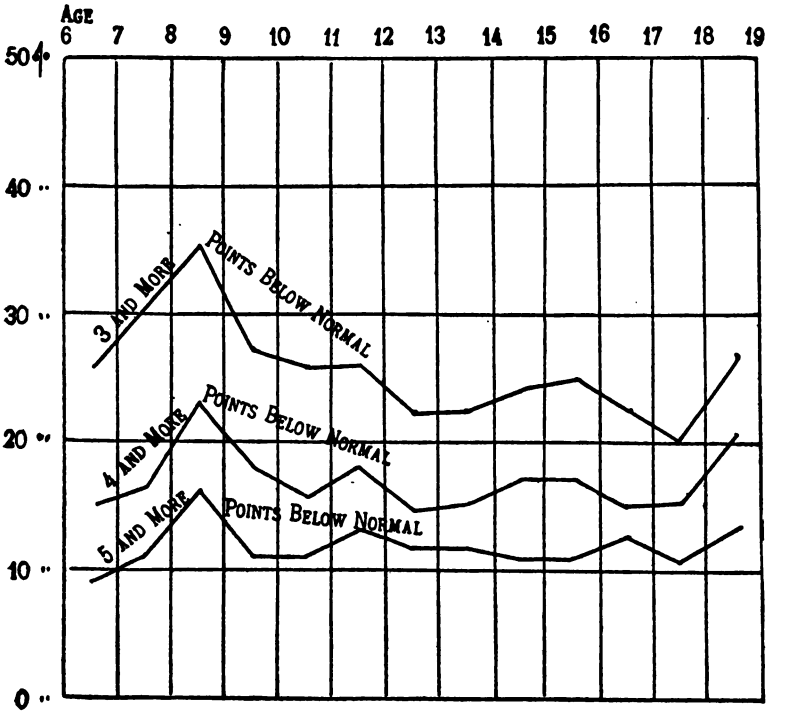


CHART XXIII.

Defective Hearing and School Standing.

Based on Data in Table XVII.

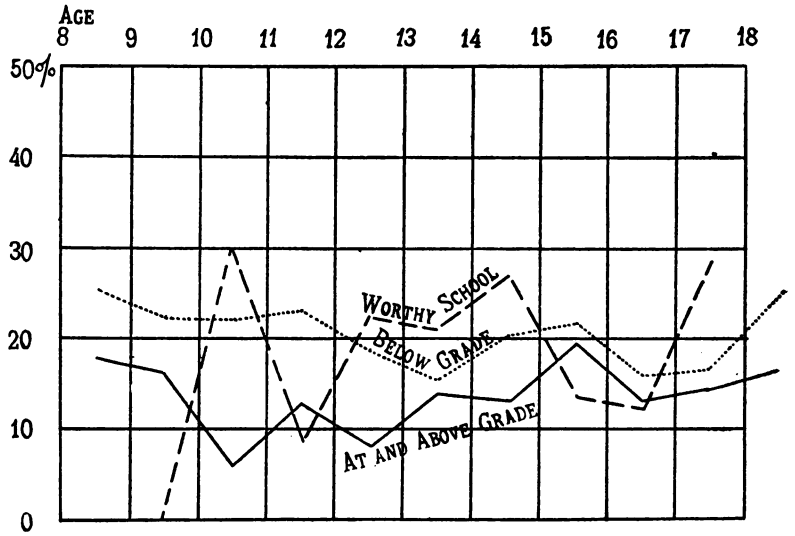


TABLE XVI. HEARING DEFECTS AND SCHOOL LIFE.

PUPILS WITH DULL HEARING.

Age.	No. Tested.	Three or More Points below Normal.				Four or More Points below Normal.				Five or More Points below Normal.			
		In One Ear		In Both Ears		In One Ear		In Both Ears		In One Ear		In Both Ears	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
6	341	89	26	56	16	52	15	22	6	29	9	8	2
7	452	134	30	72	16	73	16	32	7	51	11	15	3
8	481	167	35	80	17	112	23	46	10	79	16	25	5
9	444	119	27	67	15	79	18	33	7	58	11	19	4
10	493	127	26	60	12	79	16	34	7	56	11	18	4
11	450	118	26	64	14	79	18	32	7	62	14	16	4
12	499	107	22	53	11	75	15	28	6	60	12	17	4
13	484	105	22	48	10	74	15	32	7	60	12	16	3
14	538	128	24	56	10	89	17	32	6	58	11	13	2
15	563	139	25	51	9	94	17	34	6	66	11	20	4
16	476	104	22	50	11	73	15	36	8	60	13	24	5
17	319	64	20	33	10	49	15	24	8	36	11	16	5
18	166	45	27	12	7	35	21	7	4	21	13	2	1
..	5706	1446	.....	702	.....	963	.....	392	.....	688	.....	209	.....

TABLE XVII. HEARING AND SCHOOL STANDING.

PUPILS HAVING ONE OR BOTH EARS DEFECTIVE TO FOUR POINTS BELOW NORMAL.

AGE.	NUMBER TESTED.		NUMBER DEFECTIVE.	PER CENT. DEFECTIVE.
8	Above grade	138	25	18.1
	Below grade	85	22	25.8
9	Above grade	107	18	16.8
	Below grade	141	32	22.6
	John Worthy School	2	0	0.
10	Above grade	101	6	5.9
	Below grade	178	40	22.4
	John Worthy School	10	3	30.0
11	Above grade	77	10	12.9
	Below grade	205	48	23.4
	John Worthy School	24	2	8.3
12	Above grade	118	10	8.4
	Below grade	242	45	18.5
	John Worthy School	54	12	22.2
13	Above grade	145	20	13.7
	Below grade	213	34	15.7
	John Worthy School	47	10	21.3
14	Above grade	248	32	12.9
	Below grade	176	36	20.4
	John Worthy School	65	18	27.7
15	Above grade	164	32	19.5
	Below grade	145	32	22.
	John Worthy School	51	7	13.7
16	Above grade	93	12	12.8
	Below grade	239	38	15.9
	John Worthy School	24	3	12.5
17	Above grade	61	9	14.7
	Below grade	162	27	16.6
	John Worthy School	7	2	28.6
18	At grade	75	13	16.
	Below grade	91	23	25.2

SPECIAL ERGOGRAPHIC WORK.

The ergograph gives two kinds of information concerning the individual tested. First, it shows the energy which the individual exerts in a given time under fixed conditions. This is expressed in centimeter-kilograms and forms a basis for comparing the ergographic work of different individuals. Second, the ergographic tracing, or ergogram, made coincidently on the kymograph, exhibits the manner in which the energy was exerted. Last year in the Alcott School the course of power during the school day (See Dr. Christopher's report) was worked out by testing eight pupils at different intervals during the day and determining the average amount of work done at each period. (See Table XVIII., Chart XXIV.)

CHART XXIV.

Course of Average Power Throughout the School Day of Eight Pupils at the Alcott School.

Based on Data in Table XVIII.

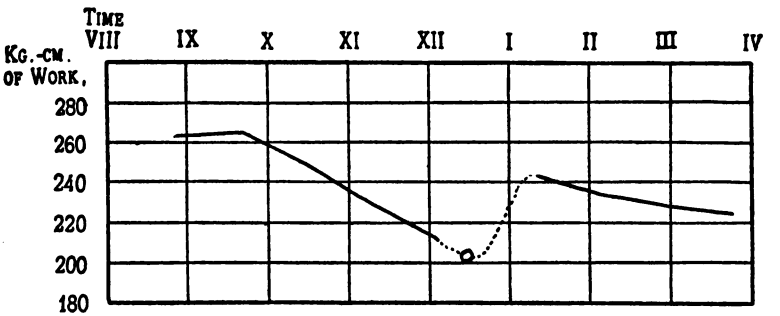


TABLE XVIII.

Data: Eight pupils (four boys and four girls) of the Alcott School were tested nine times during the school day. Each test consisted of ninety seconds' work. A weight of three kg. was lifted every other second.

Average time of test.....	8:51	9:37	10:32	11:20	12:07	1:23	2:08	3:00	3:45
Average work done.....	262	263	249	229	212	243	234	228	224

This experiment was repeated at the Tennyson School. During this process interesting data were unexpectedly obtained which go to show that the fatigue was due, in part at least, to the school work. Twelve pupils were being tested. In the case of four of them the results did not parallel the previous experience, these four showing unusual power near the close of the afternoon. Upon investigation it was found that the teacher of the four pupils had been called from school and that they had no regular work, but had been sent to another room and employed themselves, as they said, in having a good time. Charts XXV., XXVI. and XXVII. illustrate these facts.

CHART XXV.

Course of Average Power Throughout the School Day of Twelve Pupils of the Tennyson School.

Based on Data in Table XIX.

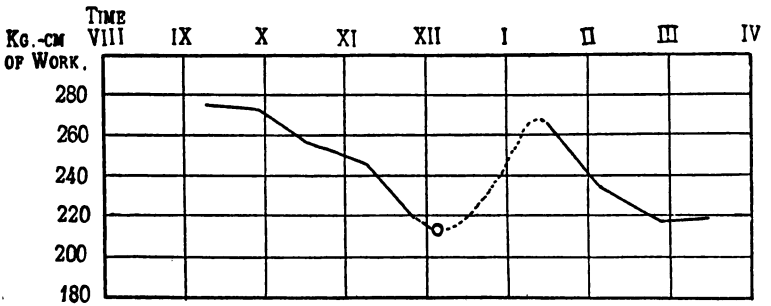


TABLE XIX.

Data: Twelve pupils (six boys and six girls) of the Tennyson School were tested nine times during the school day. Each test consisted of ninety seconds' work. A weight of three kg. was lifted every other second.

Average time of test.....	9:15	9:55	10:32	11:15	12:15	1:30	2:11	2:49	3:30
Average work done.....	276	273	258	246	220	267	235	218	219

CHART XXVI.

Course of Average Power Throughout the School Day of Four Pupils Irregular in Their Work.

Based on Data in Table XX.

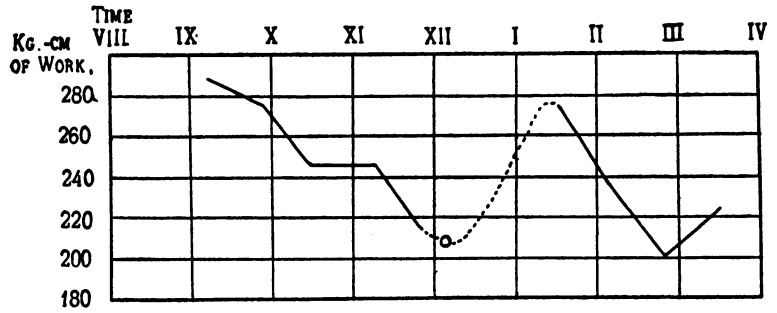


TABLE XX.

Data: Of the twelve pupils four worked irregularly, discontinuing their school work at 3 o'clock, with results as follows:

Average time of test.....	9:15	9:55	10:32	11:15	11:51	1:30	2:11	2:49	3:30
Average work done.....	289	275	248	245	215	275	237	201	224

CHART XXVII.

Course of Average Power Throughout the School Day of Pupils Doing Regular Work.

Based on Data in Table XXI.

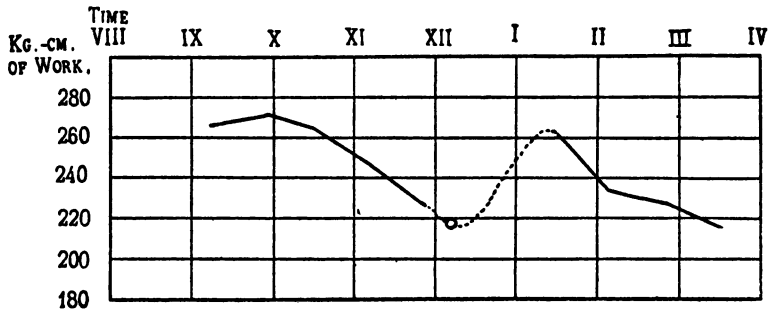


TABLE XXI.

Data: Of the twelve pupils eight worked regularly at their school work.

Average time of test.....	9:15	9:55	10:32	11:15	11:51	1:30	2:11	2:49	3:30
Average work done.....	266	271	265	245	227	262	234	228	216

While the child-study corps was at work at the Englewood High School, Principal Armstrong said that a complaint had been made by one of the patrons that certain written examinations were too exhausting, and asked to have ergographic tests made before and after an examination in geometry. This examination was unexpected by the pupils and so no opportunity was given for worry. The examination was intended to last for forty minutes, although a number of pupils finished it before the expiration of the allotted time. When asked to state whether the examination was difficult or easy, a few said that it was an easy examination, although Principal Armstrong and the majority of the class considered it to be rather hard. A comparison of the amount of ergographic work done before and after the examination showed that none of the pupils were seriously exhausted, and on the whole slightly more work was done after the examination than before it, which would seem to show that an examination of that length and given under those conditions is not exhausting.

A similar test in reference to a class exercise of forty minutes in the gymnasium gave a different result. The class made a much poorer record after than before the exercise in physical culture, yet in this work it was the weaker and not the stronger pupils who were exhausted. To illustrate this the following ergograms of two girls are given. The first ergogram of T. R., Fig. 4, shows that she is strong and has her muscles in good control.

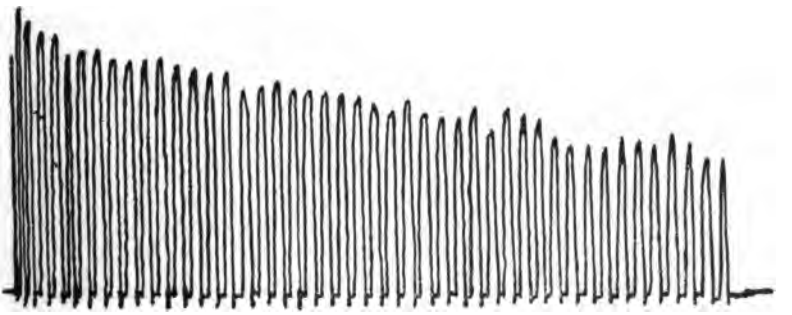


Fig. 4. Ergogram of T. R., a strong, healthy girl before taking 40 minutes' work in the gymnasium. Weight used, 3.5 kg. Distance lifted, 151 cm. Work done, 528.5 kg.-cm.

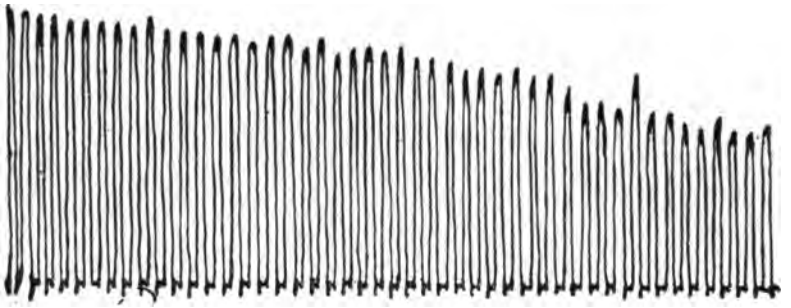


Fig. 5. Ergogram of T. R. after taking 40 minutes' exercise in the gymnasium, showing that the work was not exhausting. Weight used, 3.5 kg. Distance lifted, 149 cm. Work done, 521.5 kg.-cm.

The second ergogram taken after forty minutes of gymnasium work shows an amount of work almost identical with the first one; hence little energy has been lost through fatigue. The ergogram of a classmate, Fig. 6, shows her to be weak, and by the irregular output of energy somewhat nervous.

Fig. 6. Ergogram of C. E., a weak and somewhat nervous girl, before taking 40 minutes' work in the gymnasium. Weight used, 3.5 kg. Distance lifted, 89 cm. Work done, 311.5 kg.-cm.

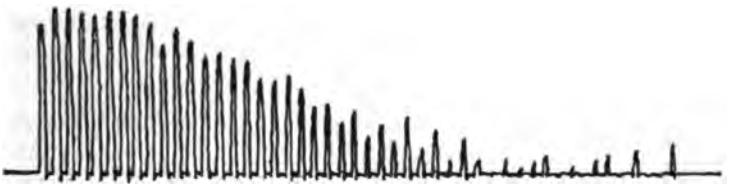


Fig. 7. Ergogram of C. E. after taking 40 minutes' work in the gymnasium, showing that the exercise proved very exhausting. Weight used, 3.5 kg. Distance lifted, 55 cm. Work done, 192.5 kg.-cm.

Her second ergogram, taken after forty minutes' work in the gymnasium, shows her to be decidedly exhausted.

As was shown by the work of last year (See Dr. Christopher's report, page 25), there is a great difference in the endurance of individual pupils, and the class work may be too exhausting for some of the pupils without especially taxing the ability of others.

CONCLUSIONS.

Many of the tests and measurements which this department has made are preliminary to other investigations, which, it is suggested, should be carried on in reference to different lines of mental development, methods of instruction, and school adjustments. It is believed that the utility of much of the work so far done will best appear as it forms a basis for these future investigations and compilations; yet there are certain truths important for educational theory and practice which have been so clearly foreshadowed as to warrant their being set forth here.

From the investigations of last year Dr. Christopher formulated the following deductions:

1. In general there is a distinct relationship in children between physical condition and intellectual capacity, the latter varying directly as the former.

2. The endurance (ergographic work) of boys is greater than that of girls at all ages, and the difference seems to increase after the age of nine.

3. There are certain anthropometric indications which warrant a careful and thorough investigation into the subject of co-education in the upper grammar grades.

4. Physical condition should be made a factor in the grading of children for school work, and especially for the entrance into the first grade.

5. The great extremes in physical condition of pupils in the upper grammar grades make it desirable to introduce great elasticity into the work of these grades.

6. The classes in Physical Culture should be graded on a physical instead of an intellectual basis.

The work this year, so far as it relates to them, confirmed these deductions, except as to the age, when great differentiation of the sexes in endurance begins. To these certain other conclusions are added, not as settled beyond any possibility of modification, but yet as being fairly indicated by these tests.

1. The pubescent period is characterized by great and rapid changes in height, weight, strength of grip, vital capacity and endurance. There seems to accompany this physical activity a corresponding intellectual and emotional activity. It therefore is a period when broad educational influences are most needed. From the pedagogic standpoint it is pre-eminently a time for character building.

2. The pubescent period is characterized by extensive range of all physical features of the individuals in it. Hence, although a period fit for great activity of the mass of children, it is also one of numerous individual exceptions to this general law. During this period a greater per cent of individuals than usual pass beyond the range of normal limits set by the mass. It is a time, therefore, when the weak fail and the able forge to the front, and hence calls for a higher degree than usual of individualization of educational work and influence.

3. Unidexterity is a normal condition. Rapid and marked accentuation of unidexterity is a pubescent change. On the whole, there is a direct relationship between the degree of unidexterity and the intellectual progress of the pupil. At any given age

of school life, bright or advanced pupils tend toward accentuated unidexterity, and dull or backward pupils tend toward ambidexterity. The pupils of the John Worthy (Bridewell) School are more nearly ambidextrous than even the backward pupils of the ordinary schools. Training in ambidexterity is training contrary to a law of child life.

4. Boys of school age at the Bridewell are inferior in all physical measurements to boys in the ordinary schools, and this inferiority seems to increase with age.

5. Defects of sight and hearing are more numerous among the dull and backward pupils. These defects should be taken into consideration in the seating of pupils. Only by removing the defects can the best advancement of the pupils be secured.

6. The number of eye and ear defects increases during the first years of school life. The causes of this increase should be investigated and as far as possible removed.

7. There are certain parts of the school day when pupils, on the average, have a higher storage of energy than at other periods. These periods should be utilized for the highest forms of educational work.

8. The stature of boys is greater than that of girls up to the age of eleven, when the girls surpass the boys and remain greater in stature up to the age of fourteen. After fourteen girls increase in stature very slowly and very slightly, while boys continue to increase rapidly until eighteen.

9. The weight of the girl surpasses that of the boy about a year later than her stature surpasses his, and she maintains her superiority in weight to a later period of time than she maintains her superiority in height.

10. In height sitting, girls surpass boys at the same age as in stature, viz., eleven years, but they maintain their superiority in this measurement for one year longer than they do in stature, which indicates that the more rapid growth of the boy at this age is in the lower extremities rather than in the trunk.

11. Commencing at the age of thirteen, strength of grip in boys shows a marked accentuation in its rate of increase, and this increase continues as far as our observations extend, viz., to the

age of twenty. In girls no such great acceleration in muscular strength at puberty occurs, and after sixteen there is little increase in strength of grip. The well-known muscular differentiation of the sexes practically begins at thirteen.

12. As with strength of grip, so with endurance, as measured by the ergograph, boys surpass girls at all ages, and this differentiation becomes very marked after the age of fourteen, after which age girls increase in strength and endurance but very slightly, while after fourteen boys acquire almost exactly half the total power in these two features which they acquire in the first twenty years of life.

13. The development of vital capacity bears a striking resemblance to that of endurance, the curves representing the two being almost identical.

ACKNOWLEDGMENTS.

This investigation has not been the work of an individual, but of a department, and I wish to commend my co-laborers, Charles C. Krauskopf, Daniel P. MacMillan, and C. Victor Campbell, for the able, painstaking and devoted parts which they have taken in all of the work of the Child-Study Department; and I wish to extend to Miss A. Loesch most sincere thanks for the timely and efficient assistance which she freely gave to this work.

To you, gentlemen of the committee, I would make most grateful acknowledgment for the generous support and valued guidance which you have given to all the work of this department.

IMPORTANCE OF THE WORK.

Let me say in closing: More positive knowledge in any art or science means progress in that line. More definite knowledge of the growth and development of the child means educational progress. A very little addition to human knowledge here is a gain, not for Chicago alone, but for the world; not for the present alone, but for all the future, and that, too, right along the path of the advancement of civilization.

Respectfully submitted,

FRED W. SMEDLEY,

Director of Dept. of Child-Study and Pedagogic Investigation.

REPORTS OF STANDING COMMITTEES.

REPORT OF THE COMMITTEE ON FINANCE.

To the Board of Education of the City of Chicago:

Your Committee on Finance respectfully presents their report in detail of the expenditures on account of the Board of Education for the school year ending June 30, 1900, as follows:

SCHOOL TAX FUND.

SALARIES—			
Superintendents and teachers		$ 4,812,560 21	
Less amount charged to School Fund	$ 782,148 31		
Less for salaries of teachers of Special Studies	367,410 92		
		$ 1,649,559 23	
			$3,163,000 98
Office employes			55,924 54
Engineers and janitors			440,802 50
Bath-room attendants (six months)			4,033 00
SCHOOL SITES—			
Northeast corner Ingleside avenue and 54th street (four quarterly payments)		$ 1,750 00	
Maxwell street, between Union and Jefferson streets		37,500 00	
Valuation of premises 184 to 204 Forquer street		51 00	
Valuation of premises 113 to 125 23d pl		31 00	
			$ 39,332 00
NEW BUILDINGS—			
On account of contracts for erection of			533,171 26
INCIDENTAL EXPENSES IN CONNECTION WITH ERECTION OF NEW BUILDINGS (FROM JULY 1 TO DEC. 31, 1899)—			
Fences and sidewalks		$ 10,013 08	
Watchmen's services		5,783 12	
Cleaning buildings and removing rubbish		193 50	
Heating during process of erection		607 02	
Scales		925 00	
Gymnasium, Lake View High School		765 00	
			$ 18,286 67
FURNISHING NEW BUILDINGS (FROM JULY 1 TO DEC. 31, 1899)—			
Seats and desks		$ 3,482 19	
Chairs		757 13	
Cork carpet, Englewood High School		385 00	
			$ 4,624 32

ARCHITECT'S DEPARTMENT—

From July 1 to December 31, 1899:

Salaries of Architects and assistants	$ 17,295 85	
Draughting supplies	500 90	
Car fare	399 05	
		$ 18,195 80

PERMANENT IMPROVEMENTS—

Fitting Up Additional Class Rooms in the Following Named Buildings:

Adams	$ 427 00	
Audubon	1,441 60	
Bancroft	1,077 08	
Belle Plaine	322 15	
Brenan	777 00	
Burley	437 00	
Chase	613 75	
Douglas	251 48	
Fallon	115 70	
Forest Glen	613 80	
Froebel	32 25	
John Ericsson	881 00	
J. R. Doolittle, Jr	135 79	
Nixon, W. P.	265 00	
Normal Practice	2,872 26	
Phil. Sheridan	2,547 00	
Ravenswood	405 20	
Spry, John	842 50	
Sumner	503 00	
Washington	1,399 20	
Wabansia	148 85	
Wicker Park	435 00	
Woodlawn	834 20	
Yale	96 75	
		$ 17,424 06

Fitting Up Manual Training Rooms in the Following Named Buildings:

Farren	$ 34 00	
Field, Eugene	257 00	
Graham	200 00	
Jirka, Frank J	289 35	
W. C. Goudy	220 50	
		$ 1,000 85

Fitting Up Kindergartens in the Following Named Buildings:

Cooper	$ 459 50	
Motley	800 00	
Scott, Walter	49 00	
		$ 1,308 50

Fitting Up Bath Rooms in the Following Named Buildings:

Fallon	$ 100 00	
Foster	494 50	

Garfield	$ 669 50	
Hoyne, Thomas	497 00	
O'Toole	490 00	
Skinner	80 40	
Smyth, John M	297 00	
Swing, David	113 00	
Trumbull, Lyman	440 00	
Walsh	475 00	
		$ 3,656 40
Fire Escapes for the Following Named Buildings:		
Jefferson High	$ 789 60	
Hartigan	673 40	
Kershaw	1,251 00	
Marsh, J. L	740 00	
Sherman	725 60	
Washington	665 00	
		$ 4,824 60
Construction of Water Closets in Connection with Old Buildings:		
Cooper	$ 918 00	
Doolittle, J. R., Jr	110 00	
Fuller, M. W	197 00	
Grayland	235 00	
Gresham Branch	398 00	
Kenwood	108 00	
Sherwood	765 00	
Washburne	1,625 00	
		$ 4,406 00
Construction of Outhouses at the Following Named Buildings:		
Longwood Branch	$ 843 77	
Roseland Branch	834 26	
		$ 1,678 03
Electric Wiring at the Following Named Buildings:		
Hyde Park High	$ 237 00	
South Division High	131 00	
Adams	75 00	
Burley	94 00	
Carpenter	75 00	
Dewey	23 50	
Farren	60 00	
Hawthorne	20 00	
Marquette	14 80	
McCosh	140 00	
Normal	340 00	
Sheldon	18 00	
Spry, John	25 00	
Worthy, John	525 00	
		$ 1,778 30

Gas Service Pipe and Fixtures in the Following Named Buildings:		
Alcott	$ 80 10	
Burnside	124 60	
Burroughs	114 80	
Calhoun	120 85	
Cameron, D. R.	74 40	
Chalmers	55 00	
Curtis	188 65	
Fallon	117 90	
Field	85 60	
Franklin	30 00	
Lafayette	45 00	
Nash	137 55	
Normal	6 00	
Parkside	73 35	
Smyth	77 70	
Spry	278 50	
Washington	104 75	
Woodlawn	67 50	
Yates	22 50	
		$ 1,804 75
Alterations in Connection With Heating Apparatus in the Following Named Buildings:		
Englewood High	$ 201 00	
Hendricks	5,689 70	
Oak Ridge	4,005 40	
		$ 9,896 10
Heat Regulation in the Following Named Buildings:		
Lake View High	$ 55 00	
Foster	60 00	
Garfield	60 00	
Hendricks	694 00	
Hoyne, Thomas	60 00	
Oak Ridge	500 00	
Smyth, John M.	60 00	
Walsh	60 00	
		$ 1,549 00
Drinking Fountains in the Following Named Buildings:		
Armour Street	$ 651 00	
Chicago Lawn	291 00	
Clarke	483 00	
Curtis	395 00	
Harrison	485 00	
Lincoln	394 00	
McLaren	410 00	
Ogden	610 00	
Pullman	97 00	
Raymond	635 00	
Sherman	173 00	
Webster	480 00	
		$ 5,104 00

Scales at the Following Named Buildings:		
Chalmers	$ 451 00	
Kershaw	451 00	
Parkman	395 00	
		$ 1,297 00
Cement Sidewalks at the Following Named Buildings:		
Alcott	$ 965 20	
Carter	421 38	
Field	135 00	
Hamilton	784 95	
Howland	29 64	
Huron Street	580 01	
Jefferson	32 11	
King	599 31	
Mulligan	279 60	
Newberry	134 31	
Normal Practice	500 00	
Woodlawn	213 66	
		$ 4,675 17
Cement Floors in the Following Named Buildings:		
Adams	$ 145 36	
Audubon	778 43	
Gresham	524 10	
Komensky	91 54	
		$ 1,539 43
Flag Poles at the Following Named Buildings:		
Beale	$ 110 00	
Earle	110 00	
Montefiore	84 23	
Parkman	84 23	
Sheldon	84 24	
		$ 472 70
Filter equipment and maintenance (from September to December, 1899)		$ 9,906 94
Venetian Blinds for the Following Named Buildings:		
Anderson	$ 25 43	
Carter	160 30	
Lowell	25 39	
McAllister	19 12	
Skinner	40 00	
		$ 270 24
Fitting up dining room at John Worthy School Building		$ 3,233 50
Steam Pipe Covering in the Following Named Buildings:		
Hendricks	$ 114 70	
Oak Ridge	74 03	
		$ 188 73
Alterations and Improvements at the Following Named Buildings:		
Agassiz, earth filling	$ 28 50	
Fallon, coal room	59 50	

Field, Eugene, plastering, etc	$ 369 75		
Moseley, wire guards	4 75		
Oak Ridge, wire guards	16 00		
Sheldon, earth filling	71 55		
Wicker Park, curbing and paving alley	163 58		
Hitching posts, sundry schools	289 00		
Surveying	52 00		
		$ 1,054 63	
			$ 77,068 93
GENERAL REPAIRS—			
Masonry and brick work		$ 543 30	
Lathing and plastering		3,312 20	
Mixed paints, oil, white lead, etc		4,469 29	
Calcimining		26,878 15	
Repairing and painting roofs		3,847 92	
Repairs to iron, tin and sheet metal work		5,666 91	
Plumbing, sewerage and gas fitting		11,884 65	
Cleaning water closet vaults		551 50	
Window glass and putty		5,700 22	
Blackboards		2,717 24	
Cleaning buildings		332 30	
Hardware and nails		4,979 10	
Lumber for sidewalks, fences, etc		16,779 43	
Repairing cement floors		267 25	
Carpenters' and laborers' wages		78,661 26	
Keep and care of horses		2,583 29	
Stable expenses		6,897 75	
Shoeing horses		1,126 51	
Whitewashing		5,004 75	
Repairs to wagons, buggies and harness		1,182 62	
Painting, graining and oiling the interior woodwork of old buildings		15,634 35	
Painting exterior, wood, brick, stone and metal work, fences, etc		10,844 22	
Removing ashes and rubbish		2,678 86	
Fitting up branches		4,141 90	
Horses, buggies and harness		973 60	
Restoring rented buildings		577 70	
Repairing venetian blinds		1,532 48	
Repairing scales		1,241 70	
Repairing flag poles		173 50	
Repairing electric bells		914 00	
Moving buildings		310 00	
Rent of telephone		473 94	
Rebuilding J. R. Doolittle School		659 95	
Rebuilding Douglas School		922 10	
Insurance		221 30	
Surveying, taxes, etc		248 68	
Fitting up offices (Schiller Building)		2,105 94	
Salaries inspectors, clerk and time keeper, from January 1 to June 30, 1900		3,656 16	
			$ 230,696 02

HEATING APPARATUS—

Substitution of Steam Heating Apparatus in Place of Furnaces in the Following Named Buildings:			
Hendricks	$ 3,883 00		
Oak Ridge	3,443 00		
		$ 7,326 00	
Ventilating Apparatus in the Following Named Buildings:			
Bancroft	$ 115 00		
Ericsson	85 00		
Hendricks	3,120 00		
Marshall	93 00		
Oak Ridge	2,245 00		
Sumner	42 00		
		$ 5,700 00	
Heat Regulation in the Following Named Buildings:			
West Division High	$ 140 00		
Adams	55 00		
Bancroft	90 00		
Burley	55 00		
Ericsson	115 00		
Nixon	55 00		
Sumner	55 00		
Yale	55 00		
		$ 620 00	
Covering Steam Pipes in the Following Named Buildings:			
Englewood High	$ 748 42		
Normal	274 38		
Jirka, Frank J	166 44		
Spry, John	210 12		
		$ 1,399 36	
Miscellaneous:			
Ordinary repairs to steam heating apparatus		$ 29,459 36	
Ordinary repairs to furnaces and stoves		3,969 92	
Cut lace, gaskets and packing		758 97	
Engine and cylinder oil		1,147 42	
Inspecting boilers		750 50	
Salaries engineers and clerks, from January 1 to June 30, 1890		1,981 36	
			$ 53,102 89

APPARATUS AND FURNITURE—

Renewal of old seats and desks	$ 7,607 50
Principals' desks	450 00
Teachers' tables	2,561 99
Chairs	2,582 52
Clocks	105 10
Repairing and cleaning clocks	625 90
Repairing old furniture	10,199 35
Reference book tables	4,511 19

Bookcases and wardrobes	$ 1,935 96	
Chart Easels	15 00	
Window shades	2,614 46	
Ink wells and glasses	987 60	
Picture frames	129 25	
Key boards	227 45	
Number tables	4,132 00	
Labor re-seating class rooms	2,456 60	
Office furniture	599 11	
Typewriters	358 15	
German teachers' tables	118 75	
Model cases	902 85	
Gymnasium apparatus	6,010 50	
Piano tuner (six months)	480 00	
Moving and repairing pianos (six months)	72 90	
Pianos (six months)	862 50	
		$ 50,526 63
RENTAL OF PROPERTY OCCUPIED FOR SCHOOL PURPOSES—		
School Fund lots	$ 11,940 00	
Rooms and buildings	62,874 78	
Offices of Board of Education	14,000 00	
		$ 88,814 78
FILTERS—		
Equipment and maintenance from January to June 30, 1900.		10,374 13
FUEL—		
Primary and Grammar Schools:		
Soft coal	$ 162,372 34	
Hard coal	30,990 07	
Pine slabs	4,326 51	
Heating Agassiz School	450 00	
Fuel inspector	713 32	
Carrying in coal	38 75	
Inspecting scales	157 25	
		$ 199,048 24
SCHOOL SUPPLIES—		
Chalk crayons	$ 1,121 30	
Lead pencils	3,567 17	
Pens	7,089 15	
Pen holders	458 25	
Writing paper	4,383 85	
Note paper	102 00	
Cap paper	2,999 76	
Ink	874 65	
Blank books and stationery	513 41	
City Directories	52 50	
Blackboard pointers	23 34	
Blackboard rubbers	980 00	
Rent of telephone	264 86	
Wrapping paper and twine	471 96	
Insurance	817 25	
Postage and postal cards	3,788 24	
Telegram charges	137 42	

Express charges and car fare	$ 296 04		
Ribbons for diplomas	47 50		
Spelling tablets	623 00		
Arithmetic tablets	5,641 18		
Straw board	325 00		
Scissors	2,619 83		
Glue	245 00		
Suppers	3 00		
Watchman, supply rooms (six months)	486 50		
Clerks' salaries, supply rooms (six months)	2,417 24		
		$	40,289 40
SCHOOL HOUSE SUPPLIES—			
Floor brushes	$ 6,105 27		
Corn brooms	274 68		
Dust brushes	972 50		
Stove brushes	2 22		
Feather dusters	283 06		
Wool dusters	416 93		
Scrub brushes	215 00		
Dust pans	73 25		
Water pails	278 12		
Soap and soap powder	1,485 18		
Sponges	176 29		
Mops and mop handles	371 94		
Coal hods	76 50		
Ash shovels	23 05		
Coal scoops	58 15		
Snow shovels	66 60		
Wheelbarrows	80 00		
Rubber hose	627 80		
Ash hoes and sluice bars	85 50		
Kerosene oil	338 18		
Iron enamel	175 00		
Oil cans	76 60		
Zinc oilers	5 75		
Lanterns, wicks and globes	117 14		
Hand rakes	18 60		
Axes and handles	39 58		
Buck saws	17 00		
Hammers	17 75		
Wrenches	87 33		
Screw drivers	1 80		
Thermometers	48 00		
Ink vents	33 00		
Tin cups and chains	707 64		
Picks and handles	6 75		
Window platforms	366 00		
Window poles	109 00		
Window washers' jackets	38 16		
Call bells and gongs	54 72		
Stove and metal polish	65 40		
Door mats	2,041 50		
Gas	3,639 24		
Electric light	1,518 13		

Rat and mouse traps	$ 38 40	
Disinfectant	187 74	
Water and ice for offices	141 66	
Salt and lime	130 00	
Electric lamps	101 94	
Electric bell supplies	281 00	
Scythe stones	12 60	
Grass seed	75 63	
Police badges	69 67	
Matches and sundries	42 10	
Waste paper baskets	148 75	
Lawn mowers	8 25	
Flags	911 25	
Step ladders	215 15	
Towels, etc	122 46	
Water, Rogers Park and Austin schools	709 14	
Supplies for bath rooms	155 25	
Clerks' salaries, supply rooms (six months)	2,417 25	
Toilet paper	82 25	
Stone jugs	18 72	
Corks	20 74	
Rent of telephone	232 50	
Truck	51 63	
		$ 27,267 39
PRINTING AND ADVERTISING—		
Publication of annual report	$ 421 50	
Publishing proceedings of Board	1,854 26	
Miscellaneous printing	8,722 79	
Advertising	712 31	
Engrossing	528 90	
		$ 12,239 76
EVENING SCHOOLS—		
Teachers' salaries	$ 52,605 50	
Engineers' and janitors' salaries	5,304 25	
Gas and electric light	4,091 39	
Fuel	1,421 25	
Printing	175 20	
Posting notices	150 00	
Repairing typewriters	78 14	
		$ 63,825 73
SCHOOL LIBRARIES—		
Additions to school libraries	$ 499 33	
Supplementary readers	2,901 39	
Maps, charts and reference books	954 35	
Rebinding library and reference books	1,099 99	
Weights, measures, etc	30 78	
Lunch, at examination for teachers' certificates	127 40	
Rent, Central Music Hall	75 00	
		$ 5,688 24
TEXT BOOKS—		
For use of indigent pupils		$ 22,089 98
ANNEXATION—		
From July 1 to December 31, 1899:		
Matured bonds	$ 21,000 00	
Interest coupons	14,194 00	
		$ 35,194 00

DISTRICT 2, T. 39, R. 13, AUSTIN—		
Salaries, engineers and janitors	$ 1,040 00	
Salary of secretary, stenographer and truant agent	118 38	
Rent	80 00	
Division of values	72 65	
		$ 1,311 03
COMPULSORY EDUCATION—		
Superintendent's and clerk's salaries	$ 3,272 62	
Salary of stenographer	251 61	
Salaries of truant agents	12,771 16	
Printing	78 65	
Car fare	20 85	
		$ 16,394 89
HIGH SCHOOLS—		
Salaries of superintendent and teachers	$ 438,492 64	
Salaries of engineers and janitors	27,454 20	
Stenographer and typewriter	545 75	
Fuel	12,867 16	
Gas and electric light	1,186 41	
Reference books, maps, charts, etc	1,122 73	
Philosophical apparatus	2,276 21	
Laboratory supplies	5,014 24	
Supplies, drawing department	455 46	
Printing	335 42	
Rebinding books	88 47	
Rent, six months	150 00	
Water, Austin High	203 24	
Diplomas	727 57	
Ink	28 28	
Lunch at examinations	30 00	
Rent of Pianos	48 00	
		$ 491,025 88
ENGLISH HIGH AND MANUAL TRAINING—		
Salaries of teachers	$ 33,260 14	
Salaries of engineer and janitor	2,520 00	
Salary of watchman, six months	470 75	
Fuel	628 57	
Rent, six months	2,700 00	
Gas and electric light	1,225 10	
Electric power	1,302 95	
Drawing paper, ink, etc	191 04	
Tools and machinery	501 81	
Laboratory apparatus and supplies	681 89	
Reference books, maps, charts, etc	31 76	
Printing	88 50	
Float	88 56	
Repairing typewriters	131 90	
Shop supplies	2,695 71	
Insurance	644 50	
		$ 47,163 18

MANUAL TRAINING IN GRAMMAR SCHOOLS—			
Salaries of teachers	$ 33,673 88		
Tools and machinery	2,245 22		
Shop supplies	5,614 36		
Electric power	43 50		
Benches	485 35		
Printing	60 00		
		$	42,122 31
MANUAL TRAINING AT THE HOUSE OF CORRECTION:			
Salaries of teachers	$ 10,358 00		
Salaries of engineers and janitor	4,979 74		
Fuel	3,235 80		
Tools and machinery	168 61		
Shop supplies	663 83		
		$	19,405 98
NORMAL SCHOOL—			
Salaries of teachers	$ 38,308 74		
Salaries of engineer and janitor	1,800 00		
Fuel	966 47		
Gas	76 60		
Text books, reference books, etc	630 42		
Printing department	667 97		
Care of school grounds	798 27		
School supplies	457 90		
Manual training supplies	184 57		
Laboratory supplies	881 73		
Desks, tables, chairs, etc	356 50		
Gymnasium apparatus	75 35		
Detective services	41 60		
Sprinkling	80 00		
Lunch at examinations	30 00		
Diplomas	116 90		
		$	45,473 02
KINDERGARTENS—			
Salaries of teachers	$ 83,807 75		
Supplies	4,934 78		
Pianos	175 00		
Chairs, sand tables, etc	773 00		
Piano tuner (six months)	240 00		
Rent (six months)	390 00		
Moving pianos	8 00		
		$	90,328 53
SCIENTIFIC PEDAGOGY AND CHILD STUDY—			
Salaries of teachers	$ 4,137 25		
Apparatus	249 92		
Printing	50 09		
		$	4,437 26
MUSIC—			
Salaries of teachers	$ 16,651 00		
Stenographer and typewriter	373 54		
Music books	3,114 85		
Printing	11 50		
Tuning and moving pianos	484 57		
Pianos and organs	469 50		
Course of lectures on the art of teaching children to sing	838 14		
		$	21,943 10

DRAWING—		
Salaries of teachers	$ 17,235 00	
Stenographer and typewriter	373 55	
Drawing paper	2,252 65	
Drawing books	378 00	
Charcoal	316 69	
Mounting board	282 75	
Fixitif	98 44	
Colored paper	300 00	
Colored chalk	1,086 30	
Brushes	474 94	
Printing	5 90	
		$ 22,804 22
PHYSICAL CULTURE—		
Salaries of teachers	$ 9,847 75	
Apparatus	123 00	
		$ 9,970 75
GERMAN—		
Salaries of teachers	$ 152,386 40	
Text books	825 00	
Printing	87 05	
		$153,298 45
DEAF MUTE SCHOOLS—		
Salaries of teachers	$ 16,560 97	
Salaries of janitors	420 00	
Fuel	112 14	
Rent (six months)	162 00	
Books and colored paper	12 63	
Manual training, benches and tools	134 82	
		$ 17,402 56
HOUSEHOLD ARTS—		
Salaries of teachers	$ 12,691 40	
Kitchen utensils	31 26	
Cooking supplies	1,687 17	
Sewing supplies	82 16	
Gas	580 00	
		$ 15,072 01
MEDICAL INSPECTION—		
Salaries of inspectors	$ 8,232 36	
Printing	108 35	
		$ 8,340 71
PARENTAL SCHOOL—		
Expenses in connection with trip to New York and Boston to visit schools for truants and crippled children	$ 157 55	
Printing report	90 00	
		$ 247 55
SCHOOL CENSUS—		
Salaries superintendent, clerks and canvassers	$ 15,912 00	
Printing, maps, books, etc	301 68	
		$ 16,213 68
LEGAL EXPENSES—		
Attorney's fees	$ 3,179 45	
Abstracts of title, court costs, etc	248 75	
		$ 3,428 20

CONTINGENT FUND, EDUCATIONAL ACCOUNT—			
Vaccinating	$ 1,858 08		
Salaries of bath room attendants, four months	2,430 66		
Interest, temporary loans	8,506 91		
Exhibit, Paris Exposition	1,674 96		
Expenses, trip to Springfield account tax levy	43 20		
Teachers council, printing, etc.	19 50		
Engrossing resolutions	332 50		
Rent, Central Music Hall	75 00		
Salary of curator of files and stores	87 81		
Expenses, National Educational Association	1,092 00		
Auditing books of School Agent	627 25		
		$	16,747 87
CONTINGENT FUND—BUILDING ACCOUNT—			
Matured bonds (six months)	$ 3,000 00		
Interest coupons (six months)	7,454 00		
		$	10,454 00
SPECIAL ASSESSMENTS—			
Filling and paving Wells Street, North Division High School lot	$ 1,500 13		
Curbing, filling and macadamizing Avenue M, Avenue M lot	90 72		
Curbing, filling and macadamizing Oak street, Oak Street School lot	276 69		
Curbing and paving Wilcox Avenue, Grant School lot	461 01		
Grading and paving Oak street, Oak Street School lot	74 48		
Curbing, grading and paving North State street, Sheldon School lot	357 72		
Curbing, grading and paving North State street, Ogden School lot	1,026 73		
Curbing, grading and paving Monroe Avenue, J. W. Scott School lot	1,319 24		
Curbing, grading and paving Campbell avenue, Grant School lot	62 36		
Curbing, grading and paving North Union street, Amerson School lot	20 03		
Macadamizing Princeton avenue, Sherwood School lot	194 00		
Macadamizing Princeton avenue, Englewood High School lot	287 00		
Macadamizing Avenue M, Avenue M School lot	824 90		
Lamp Posts, Forty-fifth street, Forrestville School lot	10 78		
Cement sidewalk, Francisco street, Calhoun School lot	9 80		
Cement sidewalk, Francisco street, Bryant School lot	25 70		
Plank sidewalk, West Forty-seventh Place, Hoerner School lot	2 07		
Water supply pipe, Wallace street, Fernwood School lot.	48 48		
Water supply pipe, North Sawyer avenue, Avondale School lot	72 72		
Water supply pipe, Follansbee street, Darwin School lot.	37 16		
Sewer in system of streets, Amerson School lot	2 70		
Sewer in system of streets, Brainerd School lot	53 79		
Sewer in system of streets, Longwood School lot	12 06		
Sewer in West Ontario street, Moreland School lot	134 28		

Sewer in Ada street, Brainerd School lot		$ 401 52	
Sewer in Prospect avenue, Longwood School lot		81 37	
State, county and city taxes, Lawndale School lot		10 12	
State, county and city taxes, School Fund property		3 00	
			$ 7,400 56
COUNTY COLLECTOR—			
For collecting taxes of 1898			40,450 61
Total expenditures on account School Tax Fund			$ 6,295,133 54

SCHOOL FUND.

Your committee has audited the recipts and expenditures on account of the School Fund for the year ending June 30, 1900, which are as follows:

INVESTMENT ACCOUNT.

Receipts.

Cash on hand for investment June 30, 1899		$ 14,449 35	
One per cent. of eight months' interest on $1,000 City of Chicago 7 per cent. bonds	$ 7 38		
Joseph McConnell's mortgage note paid	100 00		
City of Chicago 7 per cent. municipal bonds, Nos. 503 P, and 553 P, face value $1,000 each, paid	2,000 00		
From School Fund income account to restore amount of the principal used at sundry times in payment of premium on bonds purchased	11,408 46		
		13,515 84	
			$ 27,965 19

Expenditures.

Invested in mortgage note of Lizzie Quirk	$ 550 00		
Invested in City of Chicago 4 per cent Water Certificates Nos. 2052 to 2067, both inclusive, dated December 1, 1898, payable June 1, 1902, face value $1,000 each	16,000 00		
		$ 16,500 00	
Cash in hands of School Agent June 30, 1900		11,415 19	
			$ 27,965 19

INCOME ACCOUNT.

Receipts.

Cash on hand June 30, 1899		$ 201,428 54	
Rentals—			
Of School Fund Property		534,115 54	
Interest—			
Chicago City bonds	$ 9,828 44		
Mortgage loans	35,298 50		
Deferred payment of rentals	3,839 46		
		$ 48,966 40	
From O. T. Bright, County Superintendent—			
Account State School Tax 1899	$ 259,375 87		
Account tuition deaf mutes for 1899	23,405 66		
		$ 282,781 53	

Received Account Wm. A. S. Graham, ex-School Agent, Being for Receipts of Money Heretofore Unaccounted for, as Follows:			
State school tax, 1898	$ 34,500 00		
Rental School Fund property	10 00		
Interest on mortgage loan	150 00		
Corrections in teachers' pay-rolls	919 88		
Interest and expense	287 58		
		$ 35,867 46	
Miscellaneous—			
Tuition fees non-resident pupils		4,927 74	
Corrections in teachers' pay-rolls		773 26	
Return premium on cancelled insurance		83 48	
Refunded by Alice F. Atkinson		29 70	
Deposited in error		344 50	
School Tax Fund—			
Amount transferred to pay teachers		4,080,411 90	
			$ 5,139,100 05
Expenditures.			
Salaries—			
Superintendent and teachers		$ 4,812,560 21	
Expense in matter of reappraisement of School Fund property leased to National Safe Deposit Company		4,305 38	
Miscellaneous—			
Care of property, northwest corner of State and Monroe sts.		2,049 39	
Royal Trust Company, care of securities		200 00	
Transferred to principal of fund		11,413 46	
Premium and accrued interest on securities purchased		420 16	
Margaret O'Donoghue, dower in Barker lot		75 00	
Master's fees in Millen foreclosure suit		72 04	
Abstract of title, Housel property		11 50	
Taxes, Hegewisch property		33 79	
Legal expenses and court costs		413 79	
Plumbing at Bartlett property		29 75	
Expended in case of Wm. A. S. Graham, ex-school agent.		23 68	
Refunded Moseley Book Fund		344 50	
Cash on hand in City Treasury June 30, 1900		307,147 40	
			$ 5,139,100 05

INVESTMENT OF PRINCIPAL.

Your committee also reports that, in accordance with their duties as prescribed in Section 11 of the Rules and Regulations of the Board, they have examined the securities in the hands of the School Agent, and also those in the custody of the Royal Trust Company, representing part of the investments of the

School Fund, and found them to agree with the record of the fund kept in the office of the Board.

Amount of School Fund principal June 30, 1900...			$ 980,215 19
Bonds—			
34 City of Chicago 4½ per cent. bonds.....	$ 11,950 00		
335 City of Chicago 4 per cent. bonds.....	175,500 00		
15 City of Chicago 3.65 per cent. bonds.....	1,500 00		
24 City of Chicago 3½ per cent. bonds.....	23,000 00		
16 Hyde Park 4½ per cent. school bonds.....	16,000 00		
16 City of Chicago 4 per cent. water fund certificates.....	16,000 00		
Total bonds.....		$ 243,950 00	
Promissory note, M. H. Reynolds, et al.....		100 00	
Mortgage Notes—			
Charles C. Housel (in hands of Attorney).....	$ 5,000 00		
Brita Helena Billings.....	9,500 00		
Orren V. Stookey.....	3,500 00		
Minnie W. Bowen.....	7,500 00		
Henry Rosier (in hands of Attorney).....	1,500 00		
Joseph McConnell.....	100 00		
Otto F. Schuenemann.....	5,000 00		
Ole J. I. Bodahl.....	2,000 00		
Edward R. Neeley.....	2,500 00		
Melville S. Nichols.....	12,000 00		
Lizzie Quirk.....	550 00		
Hattie C. Shepard.....	4,500 00		
Laura E. Ball (in hands of Attorney).....	1,400 00		
Henry Altman (in hands of Attorney).....	8,000 00		
John P. Neal and the Great Western Railroad Company (in hands of City Comptroller)..	650,000 00		
Total mortgage notes.....		$ 713,050 00	
Real Estate—			
The "Barker Lot," being the S. 10 feet of Sub Lot 3, and the N. 10 feet of Sub Lot 4 of Lots 7 and 10, in Block 2, Fractional Section 15 Addition.....	$ 3,000 00		
The "Busby Lot," being the N. ½ of Lot 14, in Block 60, of Russell, Mather & Roberts' Addition to Chicago.....	850 00		
The "Hegewisch Property," being Lot 5, in Block 10, in Adolph Hegewisch's Sub. of part of S. ½ of Sec. 31, T. 37 N., R. 15 E.....	1,500 00		
The "Bartlett Property," being Lots 55 and 56, in Block 4, in Hough & Reed's Addition to Washington Heights.....	400 00		
The "Foot Property," being Lots 2, 3, 4 and 24, in Block 1, in Norwood Park, a Sub. in Section 6, T. 40, R. 13.....	2,000 00		

The "Millen Property," being the N. ½ of Lot 7, in Block 2, in Hilliard & Hitt's Sub. in the N. W. ¼ of Section 17, T. 37, R. 14	200 00		
The "McAuley & Lake Property," being the W. 25 feet of Lot 6, in Block 10, in Auburn Park	3,750 00		
Total real estate		$ 11,700 00	
Cash in hands of Louis C. Legner, School Agent, June 30, 1900		11,415 19	
			$ 980,215 19

SPECIAL FUNDS.

Your committee has also audited the receipts and expenditures on account of the various Special Funds held in trust by the School Agent, for the year ending June 30, 1900, as follows:

RECEIPTS.

Cash on hand June 30, 1899		$ 1,437 18	
Interest on Principal Invested on Account of—			
Carpenter Fund	$ 20 00		
Michael Reese Fund	40 00		
Moseley Book Fund	597 00		
Newberry Fund	20 00		
W. K. Sullivan Fund	6 00		
Holden Fund	3 00		
Calhoun Fund	11 00		
Sheldon Fund	50 00		
George Howland Fund	25 00		
Jones Fund	70 00		
Foster Medal Fund	317 50		
Perkins Bass Fund	217 25		
Charles Kozminski Fund	17 50		
		$ 1,394 25	
			$ 2,831 43

EXPENDITURES.

Carpenter Fund	$ 6 15		
Moseley Book Fund	370 23		
Newberry Fund	27 80		
Sheldon Fund	232 54		
Jones Fund	58 01		
Foster Medal Fund	25 83		
Perkins Bass Fund	304 45		
Charles Kozminski Fund	84 25		
Hesing German Fund	7 00		
		$ 1,116 35	
Cash in hands of School Agent, June 30, 1900		1,715 08	
			$ 2,831 43

INVESTMENT OF SPECIAL FUNDS.

Your committee also reports that they have examined and found correct the securities in the hands of the School Agent or in the custody of the Royal Trust Company, representing the principals of the Special Funds invested, as follows:

Carpenter Fund, City of Chicago 4 per cent bonds.		$ 1,000 00	
Michael Reese Fund, City of Chicago 4 per cent bonds		2,000 00	
Newberry Fund, City of Chicago 4 per cent bonds.		1,000 00	
W. K. Sullivan Fund, City of Chicago 4 per cent bonds		300 00	
Holden Fund, City of Chicago 4 per cent bonds...		150 00	
Sheldon Fund, City of Chicago 4 per cent bonds..		2,500 00	
Calhoun Fund, City of Chicago 4 per cent bonds..	$ 100 00		
Calhoun Fund, Chicago City Railway 4½ per cent bonds	400 00		
		$ 500 00	
Moseley Book Fund, City of Chicago 3.65 per cent bonds	$ 10,000 00		
Moseley Book Fund, City of Chicago 4 per cent Water Fund Certificate	1,000 00		
		$ 11,000 00	
Foster Medal Fund, City of Chicago 4 per cent Water Fund Certificate	$ 1,000 00		
Foster Medal Fund, 5 per cent mortgage note....	300 00		
Foster Medal Fund, 6 per cent mortgage note....	4,000 00		
		$ 5,300 00	
Perkins Bass Fund, 6 per cent mortgage note...	$ 3,350 00		
Perkins Bass Fund, 5 per cent mortgage note....	650 00		
		$ 4,000 00	
Jones Fund, City of Chicago 4 per cent Water Fund Certificate		1,000 00	
George Howland Fund, 5 per cent mortgage note.		1,000 00	
Charles Kozminski Fund, 5 per cent mortgage note		700 00	
Total amount invested			$ 30,450 00
Cash in the hands of the School Agent for investment			38 13
Amount of Special Funds investment account, June 30, 1900.			$ 30,488 13

JONATHAN BURR FUND.

Your committee submits the following statement of the receipts and expenditures on account of the Jonathan Burr Fund,

held in trust by the City Comptroller for the use of schools for the year ending June 30, 1900:

RECEIPTS.

Cash on hand in City Treasury, June 30, 1899	$ 1,325 15	
Interest on principal invested	1,018 74	
		$ 2,343 89

EXPENDITURES.

Text books for indigent pupils	$ 1,074 45	
Cash on hand in the City Treasury June 30, 1900	1,269 44	
		$ 2,343 89

Your committee also submits a statement of the amount now invested belonging to the principal of the Jonathan Burr Fund, the revenue of which is applicable to the purchase of books of reference, apparatus, works of art, text books, etc., for the use of schools:

Principal of fund, June 30, 1900		$ 32,700 00
Invested as follows:		
22 City of Chicago 4 per cent bonds	$ 14,700 00	
15 City of Chicago 3½ per cent water fund certificates	15,000 00	
1 City of Chicago 3.65 per cent bond	500 00	
1 Cook County 4 per cent bond	500 00	
2 City of Chicago 4 per cent water certificates	2,000 00	
		$ 32,700 00

STATEMENT OF BONDED INDEBTEDNESS OF SUNDRY ANNEXED SCHOOL DISTRICTS ASSUMED BY THE CITY OF CHICAGO AND OUTSTANDING JUNE 30, 1900.

Dis.	*T.*	*R.*	*Bonds.*	*Due.*	*Int. Coupons.*	*Payable.*	*Int. per cent*
5	37,	14	$.....	March 10, 1900	March 10,	September 10	...
			800	March 10, 1901	March 10,	September 10	6
7	37,	14	6,000	June 1, 1909	June 1,	December 1	5
1	37,	15	20,000	February 1, 1907	February 1,	August 1	5
			35,000	August 1, 1908	February 1,	August 1	5
1	38,	14	10,000	July 1, 1900	January 1,	July 1	5
			10,000	July 1, 1901	January 1,	July 1	5
			10,000	July 1, 1902	January 1,	July 1	5
			5,000	July 1, 1900	January 1,	July 1	4½
			5,000	July 1, 1901	January 1,	July 1	4½
			5,000	July 1, 1902	January 1,	July 1	4½
			15,000	July 1, 1903	January 1,	July 1	4½
			15,000	July 1, 1904	January 1,	July 1	4½
			15,000	July 1, 1905	January 1,	July 1	4½
			15,000	July 1, 1906	January 1,	July 1	4½
			15,000	July 1, 1907	January 1,	July 1	4½
2	38,	14	.....	September 1, ...	March 1,	September 1	...
			15,000	September 1, 1900	March 1,	September 1	5
			15,000	September 1, 1901	March 1,	September 1	5
			15,000	September 1, 1902	March 1,	September 1	5
			15,000	September 1, 1903	March 1,	September 1	5

Dis.	T.	R.	Bonds.	Due.	Int. Coupons.	Payable.	Int. per cent.
2	38,	14	15,000	September 1, 1904	March 1,	September 1.....	5
			15,000	September 1, 1905	March 1,	September 1.....	5
			15,000	September 1, 1906	March 1,	September 1.....	5
			15,000	September 1, 1907	March 1,	September 1.....	5
			15,000	September 1, 1908	March 1,	September 1.....	5
4	38,	14	.....	.....	February 1,	August 1.....	..
			2,000	February 1, 1901	February 1,	August 1.....	5
			2,000	February 1, 1902	February 1,	August 1.....	5
6	38,	14	11,000	June 1, 1900	June 1,	December 1.....	7
10	38,	14	41,000	June 1, 1903	June 1,	December 1.....	5
			41,000	June 1, 1908	June 1,	December 1.....	5
11	40,	13	3,500	November 1, 1900	May 1,	November 1.....	6
			3,000	May 1, 1902	May 1,	November 1.....	5
1	40,	14	500	September 1, 1889	.....	.....	6
			60,000	September 1, 1902	March 1,	September 1.....	5
			40,000	September 1, 1906	March 1,	September 1.....	5
3	40,	14	1,000	July 1, 1900	January 1,	July 1.....	5
			1,000	July 1, 1901	January 1,	July 1.....	5
H.S.	40,	14	25,000	July 1, 1905	January 1,	July 1.....	5
Total.....			$547,800				

Net decrease in bonded indebtedness during the school year, $24,000.

CONDENSED STATEMENT OF RECEIPTS AND EXPENDITURES FOR THE SCHOOL YEAR 1899-1900.

To the Board of Education of the City of Chicago:

The total available for the school year beginning July 1, 1899, was as follows:

Cash balances on hand June 30, 1899—		
Account School Tax Fund	$ 884,895 93	
Account School Fund Income	201,428 54	
Account Jonathan Burr Fund	1,326 15	
Special Funds Income (in hands of School Agent)	1,437 18	
		$ 1,089,086 80
RECEIPTS.		
From city school tax, 1898	$ 2,116,302 54	
From city school tax, 1899	4,659,444 28	
From State tax per capita	259,375 87	
From State for tuition deaf mutes 1899-1900	23,405 66	
From rentals School Fund property	534,115 54	
From interest on bonds, mortgage loans and deferred payment of rental	48,966 40	
For account Wm. A. S. Graham, ex-School Agent	35,867 46	
From interest on investments account of Special Funds per School Agent	1,394 25	
From interest on investments account of Jonathan Burr Fund, per City Comptroller	1,018 74	
From miscellaneous sources, School Tax Fund	13,077 01	
From miscellaneous sources, School Fund	5,528 68	
		$ 7,698,496 43
		$8,787,583 23

The items of expenditure are as follows:

Superintendents' and teachers' salaries, primary and grammar schools		$ 3,945,149 29
New school sites and additions to old sites		39,332 00
New school buildings and additions to old buildings		569,653 73
Permanent improvements, including alteration of old buildings and substitution of steam for furnace heating		92,114 29
Furnishing new buildings		4,624 32
General repairs to buildings, furniture, heating and ventilating apparatus		319,280 18
Salaries engineers and janitors grammar and primary schools		440,802 50
Official salaries		55,924 54
Evening schools		63,825 73
Salaries bath room attendants		6,463 66
Rentals of sites, buildings and offices		88,814 78
Rentals of filters (Jan. 1 to June 30, 1900)		10,374 13
Fuel, grammar and primary schools		199,048 24
School supplies, including ink, paper, pens, pencils, crayons, stationery, etc		40,239 40
School house supplies		27,367 39
Printing and advertising		12,239 76
School libraries, reference books, maps, charts, globes, readers, etc		5,688 24
Text books for indigent pupils		23,164 43
Matured bonds and interest coupons of annexed school districts		45,648 00
Account District 2, 39, 13 (Austin)		1,311 03
Compulsory education		16,394 89
Special attorneys' fees, court costs, etc		3,428 20
Care and management School Fund		19,392 44
On account school census, 1900		16,213 68
On account Parental School		247 55
On account medical inspection		8,340 71
On account vaccination school children		1,858 08
On account National Educational Association		1,092 00
On account exibit Paris Exposition		1,674 96
Interest on temporary loans		8,506 91
Contingent Fund, educational account, miscellaneous		1,185 26
Special assessments on school property		7,400 56
County Collector's commissions for collecting taxes of 1898		40,450 61
On account Special Funds		1,116 35
Manual Training at the Houses of Correction—		
Teachers' salaries	$ 10,358 00	
For salaries engineer and janitor, fuel, tools, shop supplies, machinery, etc	9,047 98	
		$ 19,405 98

High Schools—		
Superintendent and teachers' salaries	$ 438,492 64	
Salaries of engineer, janitors and stenographer, fuel, apparatus, laboratory supplies, gas, reference books, diplomas, printing, drawing supplies, rebinding books, etc	52,533 24	
		$ 491,025 88
English High and Manual Training School—		
Teachers' salaries	$ 33,260 14	
Salaries engineer and janitor, rent, fuel, gas and electric light, electric motor, machinery and tools, lumber, hardware, nails, laboratory supplies, foundry supplies, printing, drawing supplies, reference books, rebinding books, maps, charts, piano, cases, desks and typewriters, electric wiring, miscellaneous repairs, electric power for running machinery	13,903 04	
		$ 47,163 18
Normal School—		
Teachers' salaries	$ 38,308 74	
Salaries engineer and janitor, fuel, gas, rent of branches, salaries and supplies printing department, salary of gardener and care of grounds, laboratory supplies, reference books, diplomas, apparatus, etc	7,164 28	
		$ 45,473 02
Manual Training in Grammar Schools—		
Teachers' salaries	$ 33,673 88	
Tools, machinery, shop supplies, etc	8,448 43	
		$ 42,122 31
Drawing—		
Teachers' salaries	$ 17,235 00	
Paper, models, pencils, books, stenographer, scissors, etc	5,569 22	
		$ 22,804 22
Music—		
Teachers' salaries	$ 16,651 00	
Songs, piano tuner, stenographer, printing, etc	5,292 10	
		$ 21,943 10

German—				
Teachers' salaries	$ 152,286 40			
Text books, tablets, printing, etc.	912 05			
		$ 153,298 45		
Physical Culture—				
Teachers' salaries	$ 9,847 75			
Wands, dumb bells, Indian clubs, etc	123 00			
		$ 9,970 75		
Kindergartens—				
Teachers' salaries	$ 83,807 75			
Supplies, etc	6,520 78			
		$ 90,328 53		
Deaf Mute Schools—				
Teachers' salaries	$ 16,560 97			
Salary of janitor, fuel, text books, etc	841 59			
		$ 17,402 56		
Household Arts—				
Teachers' salaries	$ 12,691 40			
Supplies	2,380 61			
		$ 15,072 01		
Scientific Pedagogy and Child Study—				
Teachers' salaries	$ 4,137 25			
Apparatus, etc	300 01			
		$ 4,437 26		
			$ 7,098,865 09	
Cash in City Treasury, June 30, 1900—				
Account School Tax Fund, educational		$ 424,033 55		
Account School Tax Fund, buildings, etc		954,552 67		
Account School Fund Income		307,147 40		
Account Jonathan Burr Fund Income		1,269 44		
			$ 1,687,003 06	
Cash in the Hands of the School Agent—				
Account Special Funds Income			1,715 08	
				$ 8,787,583 23
Due on account School Tax Levy, 1899		$ 2,239,216 89		
Less estimated loss and cost of collection		408,968 49		
Net expectancy		$ 1,830,248 40		

Respectfully submitted,

CLAYTON MARK,
JOSEPH DOWNEY,
BERNARD F. ROGERS,
JOSEPH S. SCHWAB,
CHESTER M. DAWES,
Committee on Finance.

HIRAM H. BELDING SCHOOL. N. 42d Ct. and W. Cullom St.

REPORT OF THE COMMITTEE ON BUILDINGS AND GROUNDS.

To the Board of Education of the City of Chicago:

In presenting the forty-sixth Annual report your Committee on Buildings and Grounds is compelled by circumstances beyond our control to show a much smaller percentage of progress upon new buildings and additional accommodations than they had reason to hope for at the beginning of the school year.

In the month of July the brick strike, lasting six weeks, ushered in the smaller strikes among the petty trades in quick succession, so that building was a business of continuous annoyance and slow progress. One by one buildings came to a standstill, and many schools shown in the report of last year as confidently expected to be finished this year again appear in our columns as unfinished.

In October the Madison Avenue eight-room addition was the first to suffer from a sympathetic strike, and to-day, eight months after the strike was declared, it is in the same condition. In November the Prescott twelve-room addition met with the same fate, and the twenty-two-room George Dewey School shut down in December.

Meanwhile, work was being carried on wherever and whenever possible, working one trade at a time, separating the unions out on strike grievance as much as possible from trades whose unions were still allowed to proceed. We accomplished all that was possible under the conditions that confronted us, every month and week bringing forth new and vexing problems to be met and dealt with, until the first week in February, when the contractors in general meeting declared a lockout of all trades. This completely tied us up, although a small amount of work was attempted at times. Bloodshed and violence appeared and it was thought best

to board up our buildings under construction and place night and day watchmen on each school building, hoping for a peaceful turn of affairs.

At this time of writing the strike is still general, and with no promising signs of breaking up we enter another year under such an unfortunate and deplorable situation.

The following list shows the buildings finished during the school year:

School and Location.	Rooms.	Awarded.	Opened.	Cost.
John Spry School, S. W. Boulevard and W. 24th Street	a 22	May 18, 1898.	Sept. 11, 1899.	$105,000
Winfield Scott Schley School, N. Oakley Ave., near Potomac Ave	b 22	Sept. 7, 1898.	Dec. 4, 1899.	110,000
Eugene Field Addition, Ashland and Greenleaf Avenues	c 12	Nov. 2, 1898.	Sept, 11, 1899.	50,000
West Pullman Addition, 120th Street and Parnell Avenue	12	April 19, 1899.	Feb. 26, 1900.	43,000

a With Assembly Hall, Kindergarten, Manual Training and Cooking Rooms.
b With Assembly Hall, Kindergarten and Manual Training Rooms.
c With Kindergarten and Manual Training Rooms.

In addition to the above the following rooms were fitted up in various school buildings:

22 Class Rooms.
1 Manual Training.
5 Fire-Escapes.
3 Kindergartens.
7 Bath Rooms.
2 Offices.
Fireproof floor in Dining Room of John Worthy School.
Gymnasium in Lake View High School.

The following is a list of buildings under construction, but at present under the ban of a strike order:

School and Location.	Rooms.	Awarded.	Estimated Cost.
George Dewey, 54th St. and Union Ave.....a	22	Feb. 8, 1899.	$112,000
Darwin, Edgewood Ave. and Catalpa Place...b	22	June 14, 1899.	105,000
Madison Avenue Addition, near 75th Street . f	8	April 5, 1899.	45,000
Prescott Addition, Ashland and Wrightwood Avenues.....d	12	May 3, 1899.	62,000
Robert A. Waller High, Orchard and Center Streets.....e	15	May 17, 1899.	200,000
Charles Warrington Earle Addition, 61st Street and Hermitage Avenue c	10	July 12, 1899.	42,000
Calumet Avenue, near 27th Street.....	19	July 26, 1899.	$ 90,000
Dore Addition, W. Harrison Street, near Halsted Street .....f	12	Oct. 4, 1899.	70,000

a With Assembly Hall, Kindergarten, Manual Training and Cooking Rooms.
b With Assembly Hall, Kindergarten and Manual Training Rooms.
c With Assembly Hall and Kindergarten Room.
d With Assembly Hall.
e With Laboratories, Lecture Rooms, Drawing Rooms, etc.
f With Manual Training Room.

Plans are being prepared for other buildings ordered by the Board, but it was deemed economy to reduce the force in the Architectural Department by each employe taking an enforced vacation two weeks in each month until building operations could be resumed.

On the 21st day of June the north wing or half of the Douglas School was destroyed by fire, causing an estimated loss of $45,000. Fortunately this occurred a few days before the summer vacation and after examinations. This school, with an attendance of about 1,800 pupils, has been ordered by your Committee to be repaired and ready by the opening of school in September. Under existing conditions your architect has been empowered to use any just and honorable means to this end, and a large force of men from our Repair Department are now at work.

On January 1, 1900, the Repair Department and Workshop was transferred from the control of the Business Manager's Department and placed under the jurisdiction of the Architect, where it

properly belongs. Great benefit has resulted from this change, as our school system is growing so large that the item of repairs and alterations to buildings and property is one of considerable cost and detail management, and the Building Department is better fitted to cope with its wants and government.

Your committee feels the want of greater school accommodations in our growing city from year to year, and it is with keen regret that we have this year to report no gain; but it is safe to assume that such a calamity as the universal strike of 1900 will ultimately end in a settlement of labor trouble that will last for some time to come. These troubles out of the way, and with the large increase in revenue in the building fund of 1901, we sincerely trust to show good gain in the following years by extra effort in the Architect's Department.

Respectfully submitted,

B. F. ROGERS.
JOSEPH DOWNEY.
CLAYTON MARK.
THOMAS GALLAGHER.
D. R. CAMERON.
AUSTIN O. SEXTON.
F. J. LOESCH.
JOHN F. WOLFF.
JESSE SHERWOOD.

REPORT OF THE COMMITTEE ON CHICAGO NORMAL SCHOOL.

Hon. Graham H. Harris, President of the Board of Education:

Dear Sir—In accordance with the rules of the Board of Education I beg to submit the following brief report of the work done by the Committee on the Chicago Normal School during the school year ending June 30, 1900.

Owing to the fact that no successor to Col. Francis W. Parker had been elected, the Normal School was at the beginning of the school year placed in the charge of William M. Giffin, principal of the Normal Practice School.

On Nov. 29, 1899, after a thorough investigation of a number of candidates, Mr. Edwin G. Cooley, principal of the LaGrange High School, was nominated for the position of principal of the Chicago Normal School and was elected to the position by the Board of Education; but the Board of Education of LaGrange refused to release him until the end of the school year, and the Normal School remained in the charge of Mr. Giffin in consequence throughout the school year of 1899-1900. June 13, 1900, the former choice of the committee, Mr. Cooley, was elected Superintendent of Schools by the Board of Education.

June 27, 1900, your Committee recommended for election to the principalship of the Normal School Dr. Arnold Tompkins, President of Illinois Normal University, Normal, Illinois, and the Board of Education elected him on the same date. Your Committee feels that the selection of Dr. Tompkins was a peculiarly happy one, since his years of experience in the faculties of the Indiana State Normal School, DePauw University, the University of Illinois, and as President of the Illinois Normal University, have earned for Dr. Tompkins a more than national reputation as a Normal School educator and executive.

After careful deliberation the Committee decided that one year of training was entirely inadequate for young students who have had no experience in teaching, and therefore the course of study was lengthened to two years. With hardly an exception all first-class normal schools in this country have courses of study covering three years.

This lengthening of the course necessitated some changes in the existing programme of studies and the addition of new departments. To meet this demand a department of History of Education and a department of English were organized, the Department of English to include in its work Rhetoric, Composition, Literature and Technical Grammar.

At the beginning of the school year a two years' course of training in kindergarten principles and methods was organized for those who should desire to become kindergarten teachers in the Chicago Public Schools. It is confidently believed that this course will also be very valuable to Normal students who are preparing to become teachers in the elementary schools.

In line with the general movement to improve the course of instruction in the Normal School and to raise the standard of qualifications for admission thereto, the Committee recommended to the Board on June 13, 1900, that a board of lady physicians be appointed to conduct the physical examination of the candidates for admission to the Normal School who had complied with the educational requirements for admission to said school. This recommendation was adopted by the Board, and it is believed that the establishment of this examining board will produce good results in excluding from the school those who are physically disqualified for teaching, or in ultimately correcting such physical defects as would interfere with the work of a teacher, but which can be corrected by prompt medical attention.

It has been the constant purpose of the Committee to make the Chicago Normal School, in which our high school graduates are trained and prepared for the work of teaching in the Chicago Public Schools, the best-equipped Normal School in the country; and in our effort to make it such we have received the uniform sup-

port of the Board of Education. No expense has been spared in providing the necessary text and reference books, scientific apparatus, etc. In the selection of the faculty also the greatest care has been exercised to secure the best available talent.

With the lengthening of the course and the establishment of the departments of History of Education, English, and Kindergarten Instruction and the creation of the Board of Examining Physicians great steps in advance have been taken, which, we believe, will result in the better preparation of the students in the Normal School who are preparing for the work of teaching, and consequently in better teaching when they shall become teachers.

Thanking you, and through you the Board of Education, for the uniform courtesy shown us and the interest manifested in our work, we are

Respectfully yours,

JOHN T. KEATING,

Chairman.

REPORT OF THE COMMITTEE ON GERMAN.

Mr. Graham H. Harris, President.

Your Committee on German begs leave to report with much gratification that the number of pupils studying German in our schools is increasing from year to year. Specially noteworthy is it that among the children pursuing this study the number of those descended from American-born parents is steadily growing. This clearly indicates that the devotion to German in the public schools is not simply a commendable sentiment on the part of German parents; it is also a recognition on the part of the community of the pedagogical importance of the study of a foreign tongue and an acknowledgment of the social and commercial value of familiarity with a language which is the medium of extensive commerce, broad culture and profound scholarship.

After careful investigation and frequent consultation with the teachers and the Supervisor of German, your Committee deemed it important and necessary to add some supplementary reading to the course, and upon its suggestion the Board adopted the following books:

1. Foster, Geschichten und Maerchen.
2. Guerber, Maerchen und Erzaehlungen.
3. Deutscher Hiawatha Primer.
4. Legends of German heroes.

Your committee further suggested the advisability of putting a model teacher of German into the Normal Practice School and of incorporating into the curriculum of the Normal School a course in the instruction of modern languages. This innovation would give our prospective teachers of German the necessary pedagogical training. It would also tend to unify and improve the instruction throughout all the schools, and would eventually dispense with the necessity of engaging special teachers of German.

This suggestion has received the approval of the Superintendent, the Principal of the Normal School and the Normal School Committee. The lengthening of the course at the Normal School makes this additional study easy of incorporation. The extra expense would be slight, the advantage far-reaching. We therefore recommend to the Board the speedy adoption of this plan.

Respectfully submitted,

JOSEPH STOLZ,

Chairman.

REPORT OF THE COMMITTEE ON PHYSICAL CULTURE.

To the Hon. Graham H. Harris, President of the Board of Education:

As chairman of the Committee on Physical Culture I respectfully submit the following report for the year ending June, 1900:

During the year ending June, 1900, nothing could be done for the advancement of Physical Culture by your Committee. Because the limits drawn by the small appropriation given to our department, the committee felt obliged to reduce the number of instructors for our Elementary Schools from eleven to eight. At a meeting of your committee, which took place in January, 1900, the following recommendations were passed unanimously:

First, the apparati to equip forty-five schools granted by the Board during the year 1898-1899 should be purchased.

Second, the assembly halls of all of our schools should be equipped with gymnastic apparatus.

Third, space for gymnasium purposes should be provided in every new school building.

Fourth, to carry out the work properly the present force of teachers should be increased to thirty so that each school can be visited twice monthly.

Shortly after this meeting the appropriation for school management was cut $625,000.00, therefore the committee postponed placing the recommendations before the Board.

The present condition of bodily training, in our Elementary Schools especially, is by no means satisfactory.

The Supervisor and his eight assistants cannot visit the schools often enough to accomplish good results.

While eight teachers were employed to do the work in the Grammar Departments of only forty-eight schools in 1886, we have at present the same number of teachers to give instructions in

Grammar and Primary departments in almost three hundred schools. While in 1892-1893 the appropriation for this important part of our school curriculum was $28,000, only $10,800 was appropriated for the present year.

The importance of bodily training is gaining recognition more and more among parents, pedagogues and physicians. Parents of the Eugene Field School have lately contributed $250.00 for the equipment of a classroom with gymnastic apparatus, and for an outdoor gymnasium, so that the children of that school may have the advantage of bodily exercise without waiting for an appropriation from the Board.

The last report of the Committee on Child Study and Pedagogical Investigation shows the necessity of bodily training for our school children.

Dr. Harper, in an address to the students of the University of Chicago, lately declared that three out of five deaths which had occurred among students at the University since that institution was founded, could be traced to disregard for rules of health. "Go to the gymnasium and attend the classes regularly," he said.

The physicians who examined the candidates for our Normal School stated in their report that not sufficient time was devoted to physical exercise; that at least half an hour daily should be given in our schools for that purpose. At present fifty minutes weekly are devoted to physical training in our Elementary Schools and twenty-five to fifty minutes weekly in our High Schools. In High Schools with gymnasiums, however, pupils who attend the voluntary classes receive training under their instructor after school hours, from one to two hours weekly.

Pupils in High Schools without gymnasiums (as stated lately in the Board meeting) have asked to be transferred to schools equipped with gymnasiums, but if we give the privilege of physical training to some of our children, why not to all?

For the new buildings of the North Division High School and Robert Waller School no gymnasiums have been planned. Should not steps be taken at once to give the children of that school the same opportunities to develop their bodies as those of the North-West and Lake View High Schools?

In the John Marshall High School a small room in the basement is provided for a gymnasium, which is by no means suitable for gymnastic purposes. In the new additional building which is planned for that school a room large enough for at least one division should be provided. The pupils of the Jefferson, the South Division, the South Chicago and the Calumet High Schools have not the advantages of a gymnasium. Although a gymnasium in the additional building of the latter is planned.

In the John Worthy School the pupils receive a lesson in physical training on Saturdays, but the superintendent of that institution thinks it necessary to drill the boys every day. A gymnasium should be erected on the site and an instructor should be appointed for that school.

In closing I desire to state that in my humble judgment it is absolutely necessary that children who attend school in large cities should be given ample opportunity for bodily exercise under capable instructors and in that way secure development of their bodies, which is obtained by children in smaller cities and in rural districts by reason of the opportunities the latter have of getting such exercise in the open air and free from the crowded conditions prevailing in all larger cities.

It is universally conceded that children are being burdened more and more with studies, in order to keep abreast with the requirements of the speedily advancing age, and many instances have been cited where the health and physical condition of children have failed under the strain thus imposed upon them, and the only way such conditions can be successfully met is that the children's physical bodies must be developed in order to keep pace with the requirements; therefore I would recommend and sincerely hope that in the near future every school in the City of Chicago be provided with a properly equipped gymnasium and a sufficient number of trained instructors be employed to give the children the physical training that they thus far have been deprived of.

Very Respectfully,

CHRISTIAN MEIER,

Chairman.

REPORT OF THE SUPERINTENDENT OF COMPULSORY EDUCATION.

To Graham H. Harris, President, and Members of the Board of Education:

I herewith respectfully submit a detailed report of the work of the Compulsory Education Department from September 12th, 1899, to May 31st (inclusive), 1900. During that period 31,593 investigations of non-attendance at school have been conducted and 16,781 children placed in school. Of this number 16,490 were placed in public schools and 291 in private schools. During the year there were 5,062 truants and 11,719 non-attendants. It affords me much pleasure to state that this is the highest record for activity and successful promotion of school attendance ever attained by the department, as the following comparison of work for preceding years will demonstrate:

WORK OF THE DEPARTMENT SINCE 1889.

YEARS.	SUPERINTENDENT.	INVESTIGATIONS	RETURNS TO SCHOOL		TOTAL RETURNS TO SCHOOL.
			Public.	Private.	
1889-1890	A. A. Frankland	17463	8363	1436	9799
1890-1891	A. A. Frankland	20325	10581	673	11254
1891-1892	A. A. Frankland	12906	7157	435	7592
1892-1893	A. A. Frankland	14683	6024	1714	7738
1893-1894	A. A. Frankland	8375	3596	365	3961
1894-1895	T. J. Bluthardt	11878	4052	365	4417
1895-1896	T. J. Bluthardt	13121	5710	210	5920
1896-1897	T. J. Bluthardt	13990	6842	80	6562
1897-1898	T. J. Bluthardt	16596	9143	101	9244
1898 to July, 1899	T. J. Bluthardt	17196	9027	67	9094
Sept. 1899, to May 31, 1900.	W. L. Bodine	31593	16490	241	16781

During the past year 14,812 causes and excuses for children's non-attendance at school were ascertained, as follows:

Attending private school or being otherwise instructed	1,213
Working	831
Kept at home temporarily	3,445
Poverty	692
Illness	2,706

Physically disqualified	37
Left the city	350
Habitual truants	926
Not found or moved	2,482
Over or under compulsory school attendance age	1,253
Not vaccinated (because parents object)	57
Indifference	254
Incorrigible	183
Other causes	383

Truant officers made 5,867 extra visits in their constancy to duty.

Through the co-operation of the local charity organizations 692 children who could not attend school for lack of shoes or clothing, or because of poverty, were relieved of destitution and placed in school. Poverty is one of the greatest foes of school attendance, and I regret to state that the School Children's Aid Society is not as liberally encouraged as it should be.

It has been the policy of the department to patiently but firmly convince indifferent parents of their responsibility for their children's attendance at school. Patience and persuasion and explanation of the law have generally accomplished successful results in this respect. Where this procedure was not appreciated prosecutions have followed, and all instances have been marked with invariable success. The department has taken 31 cases into various courts, including the Juvenile Court, and lost none of them. Twelve final preliminary prosecution notices, served on indifferent parents, have obviated an equal number of prosecutions.

There were 459 special cases for investigation reported to the office.

It affords me pleasure to give special mention to the truant officers for their diligent attention to official duty and for the general excellence of their work of investigation and of returns of children to school. As a result Chicago has won first place in effective compulsory education work, and has excelled New York, Boston and other metropolitan centers of the United States in the total number of returns to school, and at the same time surpassed them in percentage of decrease in truancy during the school year.

Principals and teachers throughout the city have co-operated heartily with the department, and much credit is due them for the interest they have displayed in giving truant officers information of truancy and non-attendance of pupils at school. All principals have sent in lists verifying the truant officers' reports of returns to school.

The assurance of the early construction of the Parental School is gratifying to everyone interested in the protection and advancement of juvenile life in Chicago. With the completion and operation of the Parental School, truancy in Chicago will be reduced to a minimum.

I respectfully call the attention of the Board of Education to the fact that 1638 pupils between the ages of 7 and 14 years have discontinued school attendance at the expiration of 16 weeks during the past year, and the compulsory school law exempts them from further attendance at school for a like period each year. Hence they are beyond the jurisdiction of the department after having attended school sixteen weeks each year, and I believe that the compulsory school law should be amended and the term of compulsory attendance extended to prevent children in Chicago from running the streets with impunity after they have attended school 16 weeks under the present law. I am satisfied that many of these pupils under 14 years of age, who discontinue school attendance at the expiration of 16 weeks go to work, and that some parents swear falsely as to the ages of children in order that they may avoid the anti-child labor law, which provides that no child under the age of 14 years shall be employed.

In order that many children employed in stores did not sacrifice their education upon the altar of poverty I have been successful in enlisting the sympathy of employers of juvenile labor in the large retail establishments of Chicago, and as a result schools for these employes have been established by Marshall Field & Co., The Fair, A. M. Rothschild, Siegel Cooper & Co., and Mandel Bros. Other stores will soon establish similar schools, where the elementary branches of education will be taught two hours each day. The "store schools" are equipped and maintained by the proprietors of

the establishments where they exist. This system will prove a great factor in giving an intellectual and moral uplift to the children of the poor who are compelled to work for a livelihood.

The work of the Compulsory Education Department has been shortened during the year in order to keep within its appropriation. Economy has, therefore, been absolutely necessary in conducting the work.

The Juvenile Court has proved a great benefit to the department in caring for delinquent, dependent and neglected children. Judge Tuthill's courtesy in giving probationary officers' commissions to truant officers has been marked with beneficial results in regulating good deportment among incorrigible truants.

MEDICAL INSPECTION.

In January, 1900, fifty medical inspectors of schools were assigned to work under the jurisdiction of this department and technical direction of the Department of Health. From January 8th to April 15th, 1900, the result of their work in protecting the health of pupils at the various schools was as follows:

Total number of examinations.....76,805
Contagious diseases detected and excluded..... 4,539

The emergency corps of inspectors on duty from April 17th to June 1st, 1900, conducted 60 additional examinations and excluded 35 children from school for cause. The detailed report of exclusions of contagious diseases from schools is as follows:

MEDICAL INSPECTION JANUARY TO MAY, 1900.

	JAN.	FEB.	MARCH	APRIL	TOTAL
Diphtheria	94	41	27	8	170
Scarlet fever	165	104	80	52	401
Measles	199	135	224	90	648
Whooping cough	12	14	17	12	55
Chicken pox	184	217	200	69	670
Tonsilitis	318	164	145	62	689
Mumps	164	361	432	203	1160
Purulent sore eyes	20	13	15	7	55
Impetigo	65	53	54	21	193
Pediculosis	77	73	68	23	241
Ringworms	27	21	19	9	76
Eczema	13	13	14	8	48
Other diseases	41	33	39	20	133
Total exclusions	1379	1242	1334	584	4539
Total number of pupils examined	18155	23388	24914	10348	76805
Number of inspectors reporting	49	49	49	49	49
Number of cultures taken	140	240	257	74	711

Out of 76,805 examinations only one law suit instituted against the Board of Education by parents resulted, and in that instance Judge Ball, of the Superior Court, decided that the medical inspection of schools was constitutional and the rights of principals and medical inspectors to exclude pupils for cause were upheld. The case was never appealed.

Medical inspection has proved a great safeguard for the health of the children in Chicago public schools. The service has been handicapped by a limited number of inspectors and an inadequate appropriation to increase the force. By increasing the force the service could be improved, as inspectors now have too many schools to look after in their sub-districts. Credit is due medical inspectors of schools for their diligence to duty, for their diplomacy and general proficiency. This report demonstrates that their service has materially reduced the prevalence of diphtheria, scarlet fever and kindred diseases of childhood in the public schools.

I would respectfully suggest that health of pupils could be further protected if sanitary inspectors were appointed to regularly visit school houses and inspect the sanitary condition of buildings. In some of the rented quarters, particularly where the ventilation and general sanitary condition is bad, a system of vigilant inspection is necessary if the Board of Education desires to make the protection of health complete.

In conclusion, I desire to express my appreciation of the manner in which the Committee on Compulsory Education and the members of the Board have made the success of this department possible during the past year, by their courteous co-operation, material support and effective interest in the work. All of which is respectfully submitted.

W. L. BODINE.
Superintendent of Compulsory Education.

Summary of work accomplished in the Compulsory Department from Sept. 12, 1899, to May 31, 1900:

Total investigations			31,593
Information from schools		26,843	
Information from office		203	
Information from other sources		101	
Found by agents		4,446	
Total			31,593
Truants	6,597		
Non-attendants	24,996		
Total			31,593
Returned to public schools		16,400	
Returned to private schools		291	
Truants	5,062		
Non-attendants	11,719		
Total		16,781	
Causes and excuses for others:			
Found attending private school	733		
Found in public school	446		
Working out (compelled to earn a living)	458		
Working home (to assist in housework)	373		
Kept at home temporarily, (for such causes as clothes not in readiness, illness or death in family, etc.)	3,445		
Taught at home (by tutor or parent)	34		
Poverty (in need of relief)	692		
Illness (serious complaints)	2,706		
Physically disqualified, afflicted with St. Vitus' dance, epileptic fits, etc	37		
Left city	350		
Habitual truant (constantly running the streets)	926		
Not found or moved (having left district)	2,482		
Over or under age (over 14 or under 6 years of age)	1,253		
Not vaccinated (parents object to vaccination or neglect having it done)	57		
Indifference (parents' carelessness cause of absence)	254		
Incorrigible (fit only for truant school)	183		
Other causes (just having moved into district, no vaccination certificate, suspended, etc)	383		
		14,812	
			31,593

Total extra visits made, 5,867.

RECAPITULATION OF WORK BY MONTHS—COMPULSORY EDUCATION DEPARTMENT.

	1899-1900.									
	September.	October.	November.	December.	January.	February.	March.	April.	May.	Total.
Investigations	2529	3961	3932	2409	3932	3566	4516	3592	3156	31593
From schools	2013	3145	3156	2085	3367	3061	4039	3201	2776	26843
From office	13	31	30	16	23	17	28	19	26	203
From other sources	1	26	13	2	8	21	4	10	16	101
Found by Agent	502	759	733	306	534	467	445	362	338	4446
Total	2529	3961	3932	2409	3932	3566	4516	3592	3156	31593
Truants	242	879	1081	552	809	655	799	782	798	6597
Non-attendants	2287	3082	2851	1857	3123	2911	3717	2810	2358	24996
Total	2529	3961	3932	2409	3932	3566	4516	3592	3156	31593
Returned to public school	679	1780	2224	1286	2241	1985	2511	2020	1764	16490
Returned to private school	46	82	46	16	18	39	21	15	8	291
Truants	150	658	831	401	629	530	619	623	621	5062
Non-attendants	575	1204	1439	901	1630	1494	1913	1412	1151	11719
Total	725	1862	2270	1302	2259	2024	2532	2035	1772	16781
Found attending private school	149	192	89	37	73	33	66	50	44	733
Found attending public school	27	69	50	30	56	85	44	60	25	446
Suspended	3	10	24	21	13	19	14	6	4	114
Working out	67	63	51	34	57	24	34	56	73	458
Working home	62	61	44	22	30	23	36	48	47	373
Kept at home	316	384	406	257	405	431	501	401	344	3445
Taught at home	4	9	3	2	2	1	5	7	1	34
Poverty	63	66	60	56	96	92	138	73	48	692
Illness	134	234	282	239	365	360	523	317	252	2706
Physically disqualified	5	8	4	4	5	5	1	2	3	37
Left city	104	70	20	22	33	21	20	24	36	350
Habitual truant	48	100	139	65	94	67	137	121	155	926
Not found or moved	486	465	247	152	230	225	279	204	194	2482
Over or under age	215	236	138	94	117	100	136	120	97	1253
Not vaccinated	24	11	3	3	6	1	0	3	6	57
Indifference	22	36	29	21	44	26	24	23	29	254
Incorrigible	15	40	36	26	16	12	11	20	7	183
Other causes	60	45	37	22	31	17	15	22	20	269
Total causes and excuses	1804	2099	1662	1107	1673	1542	1984	1557	1384	14812
Total returns to school	725	1862	2270	1302	2259	2024	2532	2035	1772	16781
Total	2529	3961	3932	2409	3932	3566	4516	3592	3156	31593

REPORT OF THE SUPERINTENDENT.

REPORT OF THE SUPERINTENDENT OF SCHOOLS.

To the Honorable Board of Education:

Ladies and Gentlemen—I have the honor to submit below the Forty-fifth Annual Report of the Chicago Schools' Superintendency, being for the year which ended with June, 1900.

During said year 255,861 different pupils were enrolled for instruction under the auspices of the Board, the cost of instruction being thirty per cent of the total sum paid out by the city government during said year.

OBITUARY.

Members of the school force have died during the year as follows: Messrs. Byrne, Boyer, and Norton had been in the service long. They were teachers of great merit as well as men of high character. Obituary minutes of Mr. Byrne and Mr. Boyer were adopted by the Principals' Association, and the Board itself passed one on Mr. Norton. The other deceased were worthy of more extended mention than can be made here.

Delia E. Cureton, Emerson School, died Aug. 15, 1899.

Doris Fraenkel, Gladstone School, died Aug. 18, 1899.

Lydia U. Fishback, Goethe School, died Oct. 29, 1899.

Adelaide Pendleton, Asst. Frances E. Willard Kindergarten, died Nov. 10, 1899.

Alice M. Tate, Von Humboldt School, died Nov. 14, 1899.

Louise Murphy, Hancock School, died Dec. 22, 1899.

Blanche Bassette, Head Asst., Agassiz School, died Dec. 28, 1899.

John Byrne, Principal Auburn Park School, died Feb. 11, 1900.

Emanuel R. Boyer, late Principal South Division High School, died Feb. 24, 1900.

Nellie M. Conroy, Holden School, died March 6, 1900.

Anna E. Caskey, Sherwood School, died April 1, 1900.

Clara M. Hitchcock, Hoerner School, died April 12, 1900.

Sara M. Lloyd, Froebel School, died May 25, 1900.

James H. Norton, Principal Lake View High School, died June 29, 1900.

SUMMARY OF SCHOOL STATISTICS.

SCHOOL ACCOMMODATIONS.

	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900
Buildings owned by the city....	281	295	316	318	322	329
Rooms rented	271	296	282	332	343	363

TEACHING FORCE.

	1896-97		1897-98		1898-99		1899-1900	
NUMBER OF PRINCIPALS.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.
In High Schools.....	14	0	14	0	14	0	15	0
In Elementary Schools.....	108	109	106	111	110	111	112	114
Total number principals.....	122	109	120	111	124	111	127	114
NUMBER OF ASSISTANTS AND TEACHERS—								
In High Schools..... 128	134	130	146	143	164	148	143	
In Elementary Schools... 81	4,135	98	4,429	116	4,559	127	4,751	
Manual Training in Elementary Schools..... 17	1	21	1	32	2	33	3	
Schools for the Deaf..... 2	11	2	14	2	17	2	20	
Kindergarten	108	...	128	...	171	...	184	
Chicago Normal..... 9	11	9	12	9	18	10	21	
Special Teachers..... 25	21	25	22	28	20	38	23	
Household Arts..... ...	.....	...	.....	...	19	...	22	
Total number Assistants and Teachers... 262	4,421	285	4,752	330	4,970	358	5,207	
Total number Principals, Assistants and Teachers 384	4,530	405	4,863	454	5,081	485	5,321	
Total teaching force.	4,914		5,268		5,535		5,806	

SCHOOL CENSUS.

	1892.	1894.	1896.	1898.	1900.
Total population of the city.....1,438,010	1,567,727	1,619,226	1,851,588	2,007,695	
Under 21 years of age. 542,163	658,646	694,912	846,622	873,247	
Between the ages of 6 and 21 years..... 329,796	403,066	448,597	571,375	626,516	
Under 6 years.....	.....	.....	.....	246,731	

PUBLIC SCHOOLS.

Between the ages of 4 and 6 years	68,280	94,143	90,945	122,964	.....
Between the ages of 6 and 14 years	191,180	228,254	247,706	344,246	347,622
Under 6 years of age.....	212,367	255,580	243,315	275,247	246,731

PUPILS.

The following statement exhibits the enrollment, membership, attendance and promotions for each of the departments of our public school system for the last school year:

	Total Enrollment.	Average Daily Membership.	Average Daily Attendance.	Per cent. of Attendance.	Promotions.
Kindergartens	7,907	4,189.7	3,766.5	90.	2,594
Grades 1-4, inclusive	165,505	135,332.7	125,813.5	93.	107,256
Grades 5-8, inclusive	71,454	64,462.8	60,930.1	94.5	53,317
High Schools	10,241	9,190.	8,784.6	95.6	6,911
Normal School	497	403.6	388.6	96.3	.....
Schools for the Deaf	188	150.9	138.0	91.5	89
Total	255,861	213,729.3	199,821.3	93.5	170,167

WHOLE NUMBER ENROLLED.	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Total for the year	213,825	225,718	236,239	242,807	255,861*
Increase over previous year.	12,445	11,893	10,521	6,568	5,813*
AVERAGE DAILY MEMBERSHIP—					
Total for the year	177,710	190,471	199,621	204,731	213,729*
Increase over previous year.	12,392	12,761	9,150	5,110	5,197*
AVERAGE DAILY ATTENDANCE—					
Total for the year	165,569	178,192	187,034	190,842	199,821*
Increase over previous year.	11,353	12,623	8,842	3,808	5,577*
PER CENT. OF PUNCTUAL ATTENDANCE—	93.3	93.6	3.7	93.2	93.5
SUSPENSIONS—					
For absence	3,539	3,017	2,993	3,080	2,980
For misconduct	197	229	230	158	175

AVERAGE DAILY MEMBERSHIP BY GRADES—	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Kindergartens	.....	.....	.....	.....	4,189.7
First Grade	37,032.0	38,943.4	41,950.3	43,827.7	44,810.2
Second Grade	32,364.7	32,948.0	22,776.4	33,248.4	34,874.4
Third Grade	27,284.6	29,623.2	30,110.0	30,088.7	29,863.2
Fourth Grade	22,860.7	24,655.6	25,767.3	25,749.3	25,784.5
Total for first four grades	119,542.0	126,170.2	130,607.0	132,914.1	135,332.3

*Includes Kindergartens.

	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Fifth Grade	20,410.0	22,120.6	23,424.1	23,693.4	23,866.4
Sixth Grade	13,879.9	15,605.9	16,796.1	17,586.4	18,236.3
Seventh Grade	9,573.3	10,846.3	11,691.7	12,421.9	13,089.3
Eighth Grade	6,785.6	7,421.7	8,280.2	8,678.2	9,270.8
Total Grades 5 to 8.	50,649.5	55,994.5	60,192.1	62,379.0	64,642.8
Ninth Grade	3,279.4	3,265.8	3,535.2	2,805.1	3,880.6
Tenth Grade	2,121.2	2,141.3	2,233.2	2,346.8	2,455.5
Eleventh Grade	1,190.2	1,453.0	1,494.3	1,540.2	1,615.0
Twelfth Grade	920.0	987.0	1,169.5	1,138.5	1,238.9
Total High Schools.	7,519.8	7,847.1	8,432.2	8,830.6	9,190.0
Normal School	.....	459.7	389.7	472.8	403.6
School for the Deaf	.....	.....	.....	134.0	150.9
Total in all Depts.	177,711.3	190,471.5	199,621.0	204,731.4	213,729.3

PERCENTAGE OF PUPILS IN EACH DEPARTMENT—

	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Per cent in Grades 1 to 4	67.27	66.24	65.43	64.92	63.32
Per Cent in Grades 5 to 8	28.50	29.40	30.16	30.47	30.12
Per cent in High Schools	4.23	4.12	4.22	4.31	4.30
Per cent in Normal School	.....	.24	.19	.23	.19
Per cent in Schools for Deaf	.....	.....	.....	.07	.07
Kindergartens	.....	.....	.....	.....	2.00

AVERAGE NUMBER OF PUPILS TO EACH TEACHER, NOT INCLUDING PRINCIPALS OR SPECIAL TEACHERS—

	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
In High Schools	39	41.5	39.4	34.4	33.9
In Elementary Schools	45	45	44	41.8	42.7

Kindergarten to First Grade—2594.

NUMBER OF PUPILS PROMOTED—	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
First to Second Grade	29,042	29,020	29.686	29.912	31,303
Second to Third Grade	27,306	27,857	26,704	27,071	28,533
Third to Fourth Grade	23,354	25,495	24,950	25,525	25,312
Fourth to Fifth Grade	20,121	21,601	22,267	22,184	22,185
Total in Grades 1 to 4	99,823	103,973	103,607	104,692	107,333
Fifth to Sixth Grade	15,669	17,335	18,137	18,812	19,494
Sixth to Seventh Grade	11,043	12,763	13,138	14,146	14,872
Seventh to Eighth Grade	7,656	8,735	9,179	9,799	10,598
Eighth to Ninth Grade	5,584	6,707	7,277	7,480	8,365
Total in Grades 5 to 8	39,952	45,440	47,968	50,237	53,329
Total number promotions in Elementary Grades	139,775	149,413	151,575	154,929	163,256

PER CENT. OF PROMOTIONS BASED UPON AVERAGE DAILY MEMBERSHIP—

	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900
Kindergartens	....	....	....	....	61.9
Grades 1 to 4	83.5	82.4	79.3	78.8	79.3
Grades 5 to 8	78.9	81.2	79.7	80.5	82,7
Total Elementary Grades	82.1	82	79.4	79.3	80.0

AGES OF PUPILS.

The following statement exhibits the ages of pupils at the date of their first enrollment during the year for the last five years:

	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900
Under 6 years of age	.....	.....	.....	.....	9,472
Between 6 and 7 years of age.	35,909	37,766	39,942	40,968	39,345
eBtween 7 and 8 years	27,842	28,598	29,070	30,485	31,020
Between 8 and 9 years	24,957	26,490	27,207	27,617	29,006
Between 9 and 10 years	23,629	24,486	25,565	26,571	27,277
Between 10 and 11 years	22,549	23,817	24,544	25,714	26,505
Between 11 and 12 years	20,874	21,311	22,512	23,204	24,576
Between 12 and 13 years	19,691	21,211	22,208	22,590	23,257
Between 13 and 14 years	15,548	17,247	18,636	18,635	18,825
Between 14 and 15 years	10,185	11,161	12,583	12,620	12,420
Between 15 and 16 years	5,948	6,232	6,673	6,030	6,978
Between 16 and 17 years	3,454	3,413	3,480	3,570	3,581
Over 17 years	3,239	3,986	3,819	3,803	3,599
Total	213,825	225,718	236,239	242,807	255,861

The following statement exhibits the number in every one hundred pupils under the ages given for each of the past five years:

	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900
Under 6 years of age	....	....	....	....	3.7
Under 7 years	16.8	16.7	16.9	16.9	19.1
Under 8 years	26.9	29.4	29.2	29.4	31.2
Under 9 years	41.5	41.1	40.7	40.8	42.5
Under 10 years	52.5	51.9	51.6	51.7	53.2
Under 11 years	63.1	62.5	61.9	62.3	63.5
Under 12 years	72.9	72.0	71.0	71.9	73.2
Under 13 years	82.1	81.4	80.9	81.2	82.2
Under 14 years	89.3	89.0	88.7	88.9	89.6
Under 15 years	94.1	93.9	91.1	94.1	94.5
Under 16 years	96.8	96.7	96.9	97.0	97.2
Under 17 years	98.5	98.2	98.4	98.4	98.6
Over 17 years	1.5	1.3	1.6	1.6	1.4

COST PER PUPIL.

FOR TUITION ALONE—	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Upon number enrolled	$17.81	$17.56	$18.44	$19.46	$18.81
Upon average daily membership.	21.63	21.22	22.34	23.33	22.51
Upon average daily attendance..	23.21	22.69	23.84	26.05	24.08
FOR INCIDENTALS—					
Upon number enrolled	2.87	2.91	2.84	2.89	5.72
Upon average daily membership.	3.49	3.52	3.44	3.47	6.85
Upon average daily attendance..	3.74	2.76	3.67	3.73	7.33

FOR ALL CURRENT EXPENSES (NOT INCLUDING REPAIRS, PERMANENT IMPROVEMENTS, ETC.)	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
Upon number enrolled	$20.68	$20.47	$21.28	$22.35	$24.53
Upon average daily membership.	25.12	24.75	25.78	26.80	29.36
Upon average daily attendance..	26.95	26.45	27.51	28.78	31.41

The large increase in the cost per pupil for incidentals results from a decision of Judge Tuley, by which many charges hitherto made to the account of permanent improvements must be charged to the educational accounts and are here included under incidentals. The reduced cost of tuition this year arises mainly, if not wholly, from the shortening of the school year.

The cost for the departments given below is reckoned on all current expenses (not including repairs, permanent improvements, etc.):

PHYSICAL CULTURE—	1898-9.	1899-1900.
Upon number enrolled	$ 0.056	$ 0.038
Upon average daily membership	.067	.046
Upon average daily attendance	.072	.049
MUSIC—		
Upon number enrolled	.011	.085
Upon average daily membership	.134	.102
Upon average daily attendance	.138	.109
DRAWING—		
Upon number enrolled	.135	.089
Upon average daily membership	.163	.106
Upon average daily attendance	.174	.114
KINDERGARTEN—		
Upon number enrolled	10.92	11.33
Upon average daily membership	20.80	21.55
Upon average daily attendance	23.24	23.98

	1898-99.	1899-1900.
MANUAL TRAINING IN ELEMENTARY SCHOOLS—		
Upon number enrolled (13,902)	3.73	3.02
EVENING SCHOOLS—		
Upon number enrolled	8.04	7.35
Upon average daily attendance	20.49	11.54
HIGH SCHOOLS—		
Upon number enrolled	53.98	47.94
Upon average daily membership	60.83	53.43
Upon average daily attendance	63.72	55.89
NORMAL SCHOOLS—		
Upon number enrolled	116.76	91.49
Upon average daily membership	141.50	112.66
Upon average daily attendance	147.28	117.01
SCHOOLS FOR THE DEAF—		
Upon number enrolled	96.74	92.56
Upon average daily membership	116.97	115.32
Upon average daily attendance	128.87	126.84
JOHN WORTHY SCHOOL—		
Upon number enrolled	.....	26.15
Upon average daily attendance	.....	110.26
VACATION SCHOOLS—		
Upon average daily membership	3.15	

SCHOOL MEMBERSHIP AND ATTENDANCE.

Although our statistics are not required by the State law to deal with children between four and six years of age, the following totals include the summaries for the kindergartens as well as those for pupils six years of age and over.

The total enrollment of pupils during the year was 255,861, an increase of 5,813 or 2.2 per cent over that of the preceding year. The average daily membership was 213,729, an increase of 5,197 or 2.4 per cent over that of the preceding year. The average daily attendance was 199,821, an increase of 5,577 or 2.8 per cent over that of the preceding year.

The average daily attendance for the year 1898-9 was 78-5 per cent of the total enrollment, and the average daily membership 83.5 per cent of the enrollment. The average daily attendance for the

year 1887-8, prior to the annexation of several surrounding towns, was 74.6 per cent of the total enrollment; and the average daily membership then was 79.9 per cent of the total enrollment. For the year 1897-8 the two averages named were, respectively, 79.2 and 84.5. It will be observed that each of these averages is slightly less for the year last past than for the year 1897-8.

Sixty-three and thirty-two hundredths per cent of the average daily membership of the year were in grades 1-4, inclusive; thirty and sixteen hundredths per cent in grades 5-8, inclusive, four and forty-nine hundredths in the high schools and the normal school, and two and three hundredths in kindergartens and classes for deaf children. These figures display a gratifying increase in the proportion of the public school pupils attending in the higher grades, as is set forth more fully in the following table:

	1887-8.	1892-3.	1897-8.	1898-9.	1899-1900.
Per cent. in primary grades, I to IV.....	74.85	70.57	65.43	64.92	63.32
Per cent. in grammar grades, V to VIII.....	22.23	25.64	30.15	30.47	30.16
Per cent. in high and normal schools.....	2.82	3.79	4.42	4.54	4 49
Per cent. in kindergartens and classes for deaf children.....					2.03

The following "Table of Persistence," read diagonally downward and to the right, shows how the number of the pupils entering school in a given year decreases from year to year. The percentage in each case is the percentage of the class when it entered upon its first grade which still remained in school when it had attained the grade where the given percentage appears. Thus what may be called the class of 1897, maturing or graduating as eighth graders in that year, had for its eighth grade year a membership which was 28.8 per cent of the membership of the same class during its first grade year. In its first high school year the same class had but 15 per cent of its initial or original size. In its second high school year it retained but 9 per cent of its initial numbers. It need hardly be said that the personnel of a class greatly changes in the course of its passage through the grades, some falling out and others joining. Perhaps one-fifth of the second year members are new, not having belonged to the class during the first year.

GRADE	1889-90	1890-91	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98	1898-99
1st.....	25,788	26,669	26,684	29,480	33.538	36,734	37,032	38,943	41,950	43,828
2nd....	.....	23,197 89.9%	24,606 92.3%	25,442 88.7%	26,985 91.5%	29.198 87.1%	32.365 88.1%	32,948 89%	32.776 84.2%	33,248 71%
3rd....	.....	.....	20,706 80.3%	22,769 85.4%	24,688 84%	25.504 86 5%	27.285 81.4%	29,623 80.6%	30.113 81.3%	30,089 77.2%
4th....	.....	.....	....	16.938 65.7%	20,294 76.9%	24,460 74.5%	22.861 77.5%	24,656 73.5%	25,768 70.2%	25.749 69.5%
5th.....	.....	.....	.....	.....	15,727 61%	18,855 70.7%	20,411 71.2%	22.121 75%	23,424 70%	23,673 64.4%
6th.....	.....	.....	.....	.....	.....	12,484 48.4%	13,880 52%	15.606 54.4%	16,796 57%	17.586 52.1%
7th.....	.....	.....	.....	.....	.....	8,340	9.573 37.1%	10,846 40.7%	11,692 43.8%	12.422 42.1%
8th.....	.....	.....	.....	.....	.....	5,939	6,786	7,422 28.8%	8.280 31%	8.678 32.5%
9th— High School	.....	.....	.....	.....	.....	.....	.....	.....	3.852 15%	2.805 10.5%
10th High School	.....	.....	.. ....	.....	.....	.....	.....	.....	.....	2,347 9%

NEW SCHOOL ACCOMMODATIONS.

The school houses completed and occupied during year July 1st, 1899, to June 30, 1900, are much fewer than usual on account of the labor difficulties which have prevailed in the city during the year named.

Number of new schools..... 2
Number of additions to schools..... 2

NEW SCHOOLS.

John Spry, located Southwest boulevard and West Twenty-fourth street, containing twenty-two class rooms and assembly hall; occupied September 11, 1899; number of seats, 1,274.

Winfield Scott Schley, located North Oakley avenue, near Potomac avenue; containing twenty-two rooms and assembly hall, kindergarten and manual training; occupied December 4, 1899; number of seats, 1,056.

ADDITIONS.

Eugene Field, located Greenleaf and North Ashland avenues; containing twelve class rooms, kindergarten and manual training; occupied September 11, 1899; number of seats, 576.

West Pullman, located One Hundred and Twentieth street and Parnell avenue; containing twelve class rooms; occupied February 26, 1900; number of seats, 576.

	Seats in buildings owned by city.	Increase over preceding year in buildings owned by city.	Seats in Rented Rooms.	Pupils in Half-day Sessions at close of year.
1890.....	113,592	Annexation.	5,476	*.....
1891.....	121,159	7,567	7,628	15,733
1892.....	132,465	11,306	8,773	18,069
1893.....	141,968	9,503	10,862	14,375
1894.....	162,127	20,159	10,867	14,086
1895.....	174,205	12,078	12,643	17,545
1896.....	188,724	14,519	13,507	15,036
1897.....	202,194	13,470	12,368	12,475
1898.....	204,124	1,930	14,807	17,235
1899.....	213,753	9,629	15,545	16,210
1900.....	220,728	6,975	15,406	16,092

There were 13,015 children attending school in rented rooms at the close of June, 1898, and 13,439 at the close of June, 1899, an increase of 424, and 14,512 at the close of June, 1900, an increase over that of the preceding year of 1073. There were 17,235 children in half-day sessions at the close of 1898, and 16,210 at the close of 1899, a decrease of 1,025, and 16,092 at the close of June, 1900, a decrease of 118.

The number of seats in buildings owned by the city—220,728—is greater than the average daily membership of pupils—213,729, some school buildings are therefore but partly filled. This dissidence cannot, in so great a system, be wholly avoided. By close watch, however, upon the ebb and flow of population in the different quarters of the city, the number of sittings in the districts where school population is diminishing may be lessened and needed buildings be erected in the crowded districts. In a district where population bids fair to fall off it is obviously good policy to place overflow pupils in rented rooms for a time until the need of additional school house structure is perfectly clear.

EXAMINATIONS.

Examinations for various positions were held as follows:

	Number examined.	Number successful.
Sept. 1, 1899, positions in the Chicago Normal School...	17	11
Sept. 9, 1899, High Schools—Teachers of Spanish.....	15	6
Sept. 16, 1899, assistants in the Departmentment of Child Study	7	3
Oct. 14, 1899, evening schools—teachers of bookkeeping, stenography, and English to classes of foreigners...	65	60
Nov. 14, 1899, teachers of German in Elementary Schools.	20	10
Dec. 16, 1899, evening schools—teachers of stenography and English to classes of foreigners.....	26	19
Dec. 23, 1899, teachers of Manual Training.....	6	5
Jan. 1, 1900, principals of Elementary Schools.....	1	1
Jan. 1, 1900, teachers in Elementary Schools.....	9	8
June 13, 1900, Teachers of Kindergartens.....	150	77
June 14, 1900, admission to Chicago Normal School.....	504	153
June 19, 1900, teachers of German in Elementary Schools.	20	14
June 20, 1900, teachers of deaf children.....	6	6
June 22, 1900, teachers of manual training.....	8	5
June 26, 1900, High School teachers.....	153	36
June 26, 1900, teachers of French in High Schools.....	7	4
June 26, 1900, teachers of German in High Schools.....	8	0
June 26, 1900, teachers of Spanish in High Schools.....	1	1
June 26-27, 1900, teachers in Elementary Schools.....	212	58
June 26-27, 1900, principals of Elementary Schools.....	100	23
Total	1,335	497

THE CONDITION OF THE SCHOOLS.

The year has been one of steady and on the whole highly satisfactory progress. Superintendents, supervisors, principals and nearly all teachers have given assiduous and unremitting attention to their duties. With rare exception teachers are ambitious to advance in professional attainment. The reports reaching my office as well as information gathered in various incidental ways assure me that the teachers have performed this year a greater amount of study than ever before. Not a few of them have studied beyond

their strength. With ambitious teachers the tendency to do this is a real danger against which I have repeatedly given warning. Young teachers, in particular, should be made to feel their physical limitations, and to see that their best ultimate service to the schools depends on the gradual maturing and the continuance of their powers rather than on extraordinary professional achievements during their first years. I urge earnest teachers to trust and try to develop their own powers, and not to expect too much from books, especially the formal psychologies so much studied of late years. Few of the school psychologies thus far published, whether more metaphysical or more psychological, are worth a teacher's reading. Biological psychology, of which child study is the best known phase, is the order of the day. No teacher without the taste for it should feel obliged to study even this save in a natural and practical way. As William James says, "Let not the prosecution of it be pushed as an imperative duty on those to whom it proves an exterminating bore, or who in any way whatever miss in themselves the appropriate vocation for it. . . . The teacher's attitude toward the child, being concrete and ethical, is positively opposed to the psychological observers, which is abstract and analytic. Although some of us may conjoin the attitudes successfully, in most of us they must conflict."

ORGANIZATION AND ADMINISTRATION.

Earnest effort has been made this year to unify the school organization in the system as a whole and in each district, by annealing the kindergartens to the schools above and by making the music teachers' districts and also the drawing teachers' the same as those of the assistant superintendents. Only so can a superintendent be justly held responsible for all the work of his district. The introduction of the ideal named has been attended with some difficulty, but progress has been made toward it, greatly to the betterment of school administration.

As most phases of our school work are well understood and generally approved, this report need not occupy itself with them further than to present the usual statistical exhibit. The observa-

HERMAN FELSENTHAL SCHOOL. Calumet Ave., near 41st St

tions which follow relate for the most part only to those departments which in my judgment deserve greater and more enthusiastic support than they now receive.

DRAWING.

After a long, earnest and noble struggle the devotees of art work in the public schools have made nearly all agree with them touching the pedagogic value of the discipline. Its social value is less generally recognized but it is very great.

No community can do too much to propagate among the people a love for true art. It is a pity that the art work in our public schools should be jeered at as a fad. Many think of an agency like the Art Institute as quite without social significance or function, an extra elegance for the wealthy and the leisurely, meant solely for such as would themselves enjoy life but have no wish to enrich, purify or strengthen the life of society at large. There could hardly be a greater misconception. The spread of esthetic taste among the citizens is a vast public benefit worthy the patronage of every patriot.

Schemes for promoting art culture are important everywhere, but in great cities, especially those using soft coal, they are indispensable and imperative. Country people forever have before them Mother Earth with her infinite and ever shifting species of matchless loveliness—surfeits of eye-beauty in landscape, waterfall, frost-play, lightning, sunshine, sky and rainbow; surfeits of ear beauty in the wind, in the rush of brooks and rivers, in the thunder's diapason, and in the choruses of inimitable bird-music waking them morning by morning. All these are moral influences of the utmost importance. How much of that glory inhabitants of great cities miss! They see the sky at best in retail pieces, often never at all for days, the sun eclipsed behind clouds of black smoke, never a whole rainbow, but only choppy bits of one now and then, dingy and ashamed, athwart tall chimneys and sky-scraping business blocks.

There must be in Chicago multitudes of children, if not of men and women, who have never yet in all their lives seen a natural

forest, meadow, grass-plat, mountain, or waterfall; have never heard "the wild sough of the sea," or even the lake's feeble imitation thereof, and have never listened to one of those bird oratorios which each summer morning turn every countryside in the world into a portico of heaven. To most denizens of cities these precious, unique, original sources of art cultivation are seven-sealed books. Cities must open to their children the best possible secondary sources in music, architecture, painting, sculpture and literature. We need to cultivate creative art power and not merely art receptivity and appreciation. Creative power is to be cherished not alone and not mainly that we may always have plenty of great artists, but that the rank and file of society may ever possess the most virile possible esthetic and moral life. Esthetic creativeness conduces more to real art life and so to morality than esthetic receptivity does.

PHYSICAL CULTURE.

In introducing gymnastic apparatus into more schools the past year, and in erecting and equipping a gymnasium in the Franklin School, the Board has taken important steps for the advancement of physical culture.

The new exercises were heartily greeted by teachers and pupils. The large number of applications by principals for the equipment of schools with apparatus shows how favorably they look upon progress in gymnastics. It is a general conviction that the same attention should be paid to bodily as to mental education. "The gymnasium is a blessing to my pupils," said the Principal of the Franklin School. Gymnastic exercises will be a blessing to all our schools if the Board can see its way to give the physical culture work adequate support.

I earnestly hope that the postponed gymnastic equipment of the forty-five schools which the Board has already voted to equip may soon be effected. Important schools like the Von Humboldt, Arnold, Calhoun, Burnside, Eugene Field, and Schley should not longer await this desirable part of their outfit. The need of a well equipped gymnasium for the John Worthy School is especially

urgent. The assembly hall in each of our schools ought to be equipped with gymnastic apparatus. In schools without such halls, a class room should be given up to gymnastic uses. In every new building a special room should be set apart and fitted up for this purpose, no apparatus being placed in corridors.

Thoroughly educated teachers of physical culture should give the instruction, and give it often enough to gain good results. Every pupil should have such instruction at least once a week.

When light gymnastics were introduced, the work being new and the regular teachers unable to conduct it, each class was given a lesson twice a week by a special teacher. The heavy gymnastics more recently put in are also new as well as more complicated than the light. More skill and a higher order of talent is therefore required in teaching them.

Each school supplied with gymnastic apparatus should be visited by a competent special instructor twice weekly. The present force of teachers, smaller than heretofore on account of the Board's slender resources, is not strong enough to do what is now required; it is still less able to make the instruction anything like ideally complete.

Special instruction can be given only about once in three months. The schools supplied with apparatus receive an extra visit once a month, but only half of the pupils in these schools can be taught at a time. For each fifty or sixty pupils in a kindergarten at least two teachers are provided. At least one teacher of physical culture should be appointed for each two thousand pupils, as suggested for the Von Humboldt School, yet of the eight at present employed in the elementary schools each must instruct 30,000 or more pupils.

In the above observations I am simply concurring in Supervisor Suder's suggestions. I do not think that zeal for his department renders him an extremist.

It is a great mistake to suppose the benefits of physical exercise by pupils confined to the conservation of their health and mental alertness for the time being. These benefits reach incalculably far and are of the most varied value. Systematic bodily

exercise often cures grave and even congenital ailments. It relieves many complaints which cannot be cured. It wards off physical and mental ills to which persons of a sedentary life are especially prone. It lengthens the active years and the total years of men and women who are free from specific diseases. It lessens in violence, in frequency and in duration such attacks of illness as befall quite strong people. It puts ease and cheer into hard work and good temper into all the relations of human beings. It tends to impart permanent strength, sanity and order to the mind and to develop that firmness of will without which, particularly in the great crises of life, the most gifted of mortals become the sport of fate.

In case of city pupils careful physical training is more than ordinarily necessary. City youth are very apt to be ill-developed in their vital parts. Even if they romp and play much, which many of them will not do, they rarely engage in the strenuous exercises needed to steel the muscles of heart, lungs and diaphram. For most farmers' sons and daughters this result is produced by the hard work they do, making that work a blessing for which they ought to be devoutly grateful. The young people in city schools still have time to put themselves in good physical condition, but not one in a hundred of them will take the proper means to this end save as required by the school authorities.

Regular drill in the gymnasium is of course to be highly prized. All pupils should utilize the gymnasium long enough to be taught where they are weak and to obtain the idea of system in schooling the body. But outdoor exercises should always be indulged in as often as possible, partly for the benefit of fresh air and partly to secure the invaluable zest of play. To perfect this zest of play, games, duly regulated, are not only admissible but desirable. The lack of play ground at most of our schools is matter of deep regret. I therefore approve under reasonable regulations all the usual forms of sport—track athletics, tennis, baseball, basket ball and football. The benefit of sound physical education reaches beyond the body. Many sports are of extraordinary intellectual value. Football excels in this respect. Good play proceeds much more from brain than from muscle. The same is true to a consid-

erable extent of baseball and tennis. Nearly all earnest sport properly carried on also has immense moral value for all participants. It develops independence of action, the sense of individual responsibility and at the same time fits for joint activities, co-operation and obedience to authority. It cultivates the will, particularly the power of instantaneous decision. It trains the sense of fairness. It imparts moral poise, the ability to be fair when under powerful provocation to take advantage.

The pure and direct pedagogical value of physical culture is not easily exaggerated. It promotes sense of form, measure, rhythm, orderliness and grace. It gives appreciation of accuracy, which Cardinal Newman well denominated "a great part of true education." Above all, it is motor work, developing the motor centers of the hemispheres, demanding and evolving efficiency, the power to bring things to pass—that all-important sphere of education which till quite recently had been inexcusably neglected. In this aspect of its usefulness physical culture is comparable with manual training itself.

KINDERGARTENS.

The statistics of the kindergarten department for the year are:

	1897-8.	1898-9.	1899-1900
Number of Kindergartens	63	84	91
Total enrollment of pupils	5,546	7,241	7,976
Average daily membership	2,904	3,801	4,189.7
Average daily attendance	2,607	3,402	3,766.5
Per cent of attendance	89.8	89.5	90
Promotions	.....	.....	2,594

The kindergartens are now legally a part of the school system. The benefit which they confer on the community is increasingly obvious and recognized. In all parts of the city parents await with anxiety the opening of new kindergartens, a process which, unfortunately, like so many other lines of school advance, had to be remitted this year owing to the Board's poverty.

When young children have at home plenty of suitable play room the absence of kindergarten facilities, though regrettable, is not a serious matter from any point of view. In the poorer districts, however, it is a deplorable lack pedagogically, morally and socially.

In many portions of Chicago the need of kindergartens is a crying one.

Meantime effort has been made to secure from the existing system better results than had been forthcoming. Each kindergarten has been made more than before a true part of the school, a sub-primary grade, related to the first grade as the first is to the second. The Superintendents have exercised on the kindergartens a closer surveillance than formerly. This has worked admirably, not only as unifying the sub-primary work with the school above, but as obviating certain rather serious faults into which the less original kindergartners were falling through the formal and servile following of Froebel's precepts. I am happy to say that the great body of kindergarten instructors now show an excellent disposition in this matter The training of kindergartens is so rapidly improving both in spirit and in matter that danger from the source named is, one may hope, mainly past.

MANUAL TRAINING AND THE HOUSEHOLD ARTS.

Manual training has had good development this year. The number of shops has increased from 33 to 54; the number of schools sending boys, from 168 to 177; the number of boys instructed, 13,902. Fortunately no one now need argue for this phase of public school instruction. Since my connection with the schools I have not heard a single voice raised in objection to it yet. I beg to mention its extreme value in the formation of character. It wonderfully interests boys who tend to vice. Since the John Worthy School was opened not one inmate has had to be urged to attend to his shop work or needed reproof for his misbehavior therein. At Menominee, Wis., a splendid private manual training school has entirely put an end to street loafing on the part of boys. Those formerly given to it now spend their evenings making useful articles and are reluctant to leave when 9 p. m., the closing hour, arrives.

Owing to lack of increase in outfit the department of household arts has not grown, though the instruction in it has been able and painstaking. I am persuaded of its value. Like manual training, it develops constructive mentality and power, inventiveness

and a many-sided growth of mind. The schools where these arts are taught have been largely attended and the work eagerly done. The effect upon home life continues to be most beneficient. I recommend that the department be enlarged as soon as this can be done. It will justify itself even if—which is desirable and perfectly justified by theory—forms of manual training proper should, by and by, be made valuable for girls as well as boys.

Number of schools for cooking	10
Number of teachers in cooking	10
Number of teachers in sewing	12
Number of schools sending pupils	145
Number of pupils in sewing	4,710
Number of pupils in cooking	3,659

THE EVENING SCHOOLS.

The evening schools had a prosperous and successful term. Following are the general statistics:

	1898-9.	1899-1900.
Number of Elementary evening schools	37	31
Number of High evening schools	7	7
Number of evenings in session	108	76
Number of teachers	289	287
Number of pupils enrolled in elementary schools.	8,887	7,011
Number of pupils enrolled in High schools	2,249	1,669
Total number enrolled	11,136	8,680
Total average attendance	4,325	4,810
Total cost of maintenance	$89,537.78	$63,825.73
Average cost per pupil enrolled	8.04	7.35

The following amounts were expended for the maintenance of these schools:

FOR TEACHERS.	FOR ENGINEERS AND JANITORS.	FOR FUEL, LIGHT AND INCIDENTALS.	TOTAL EXPENDITURES.	COST PER PUPIL.	
				On Total Enrollment.	On Average Attendance.
$52,605.50	$5,304.25	$5,915.18	$63,825.73	$7.35	$11 54

Such is now the interest of the public in our evening schools that I feel justified in submitting the following somewhat detailed figures exhibiting their work.

STATEMENT SHOWING VARIOUS ITEMS OF ATTEND-

SCHOOLS.	NUMBER OF EVENINGS IN SESSION.	DATE OF OPENING OF SCHOOLS.	DATE OF CLOSING OF SCHOOLS.	TEACHERS.		Total Enrollment.		
				Total Number Employed.	Total Number of Evenings' Instruction.	Male.	Female.	Total.
Englewood High	58	Nov. 6, 1899	Feb. 12, 1900	9	494	137	73	210
North Division High	71	Nov. 6, 1899	Mar. 2, 1900	8	558	162	78	240
Northwest Division High	71	Nov. 6, 1899	Mar. 2, 1900	10	662	243	70	313
Pullman High	71	Nov. 6, 1899	Mar. 2, 1900	7	437	128	21	149
South Chicago High	71	Nov. 6, 1899	Mar. 2, 1900	6	447	147	40	187
South Division High	67	Nov. 6, 1899	Mar. 2, 1900	8	507	143	70	213
West Division High	75	Nov. 6, 1899	Mar. 2, 1900	11	799	236	121	357
Agassiz	76	Nov. 6, 1899	Mar. 2, 1900	8	537	192	46	238
Bismarck	42	Nov. 6, 1899	Jan. 12, 1900	6	261	117	23	140
Bowen	76	Nov. 6, 1899	Mar. 2, 1900	4	234	106	36	142
Brighton	76	Nov. 6, 1899	Mar. 2, 1900	6	484	167	23	190
Burr	76	Nov. 6, 1899	Mar. 2, 1900	7	503	166	40	206
Dore	76	Nov. 6, 1899	Mar. 2, 1900	7	478	173	23	196
Emerson	55	Nov. 6, 1899	Jan. 26, 1900	6	291	105	33	138
Froebel	76	Nov. 6, 1899	Mar. 2, 1900	13	881	298	44	342
Garfield	76	Nov. 6, 1899	Mar. 2, 1900	29	1782	560	185	745
Hammond	76	Nov. 6, 1899	Mar. 2, 1900	14	1076	335	70	405
Harrison	59	Nov. 6, 1899	Feb. 9, 1900	6	312	122	27	149
Haven	76	Nov. 6, 1899	Mar. 2, 1900	6	477	237	57	294
Hendricks	53	Nov. 6, 1899	Feb. 2, 1900	6	329	118	42	160
Holden	51	Nov. 6, 1899	Jan. 26, 1900	8	336	174	16	190
Huron Street	47	Nov. 6, 1899	Jan. 19, 1900	5	220	108	31	139
Lyman Trumbull	77	Nov. 6, 1899	Mar. 2, 1900	8	640	266	66	332
Montefiore	62	Nov. 6, 1899	Feb. 16, 1900	6	389	188	22	210
Newberry	52	Nov. 6, 1899	Jan. 26, 1900	6	277	59	34	93
Newsboys' Home	76	Nov. 6, 1899	Mar. 2, 1900	1	76	42	.....	42
Perkins Bass	52	Nov. 6, 1899	Jan. 26, 1900	6	322	92	49	141
Pullman	76	Nov. 6, 1899	Mar. 2, 1900	6	398	154	36	190
Raymond	67	Nov. 6, 1899	Feb. 16, 1900	6	419	137	63	200
Scammon	76	Nov. 6, 1899	Mar. 2, 1900	6	464	178	35	213
Scanlan	33	Nov. 6, 1899	Dec. 22, 1899	4	135	71	16	87
Seward	52	Nov. 6, 1899	Jan. 26, 1900	7	327	284	25	309
Sherwood	53	Nov. 6, 1899	Feb. 2, 1900	7	377	179	31	210
Throop	76	Nov. 6, 1899	Mar. 2, 1900	15	1087	331	111	442
Von Humboldt	76	Nov. 6, 1899	Mar. 2, 1900	7	520	190	79	269
Wells	76	Nov. 6, 1899	Mar. 2, 1900	16	1054	354	85	439
West Division Ele	75	Nov. 6, 1899	Mar. 2, 1900	2	139	66	14	80
Hyde Park High, Walters' School	30	Jan. 22, 1900	Mar. 2, 1900	4	120	68	12	80
Totals	2,484			287	18,859	6,833	1,847	8,680

ANCE AT EACH OF THE EVENING SCHOOLS.

PUPILS.

Total Number of Evenings' Attendance.			Average Attendance per Evening for Entire Session.			Average Number of Evenings' Attendance for each Pupil Enrolled			Certificates Issued.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
4,797	2,517	7,314	82.7	43.4	126.1	83.4	45.5	128 9	... .	....	.....
6,872	3,372	10,244	97.0	47.6	144.6	104.4	49	153.4	53	29	82
9,645	3,069	12,714	135.6	43.2	179.0	128.8	44.2	173	75	30	105
4,886	782	5,668	68.8	11	79.8	88.3	14.9	103.2	33	7	40
6,103	1,569	7,672	86.0	22.1	108.1	92	23	115	55	13	68
4,690	2,741	7,431	70	41	111	84	46	130	.....	.....	.....
9,320	5,428	14,748	131.4	77	208.4	139	79.5	218.5	87	45	132
7,213	1,437	8,650	94	19	113	103	21	124	42	15	57
3,101	643	3,744	76.2	15.3	91.5	84	17.3	101.3	.....	25	25
4,638	1,253	5,891	61	16.5	77.5	63.4	16.6	80	39	6	45
6,760	1,037	7,797	88.9	14.1	103	95.8	14.8	110.6	27	4	31
7,188	1,920	9,108	95.6	25	120.6	107.9	26.4	134.3	61	13	74
8,288	929	9,217	106.3	12.2	118.5	119.7	12.7	132.4	44	8	52
3,898	892	4,790	69	18	87.0	77.1	20.5	97.6	.....	.....	.....
11,650	2,177	13,827	144.2	29.7	173.9	160	35	195.0	66	23	89
26,155	8,413	34,568	344.1	109.8	453.9	402.7	134.8	537.5	141	52	193
17,548	2,517	20,065	165.0	25	190	267.9	40.9	308.8	67	10	77
5,206	883	6,089	88.5	15.5	104	90.2	16.2	106.4	14	5	19
9,116	1,957	11,073	119.9	25.8	145.7	126.5	28	154 5	85	20	105
4,435	1,378	5,813	83 7	26	109.7	93.8	28.4	122.2	40	10	50
3,753	347	4,100	73.3	6.8	80.1	91.3	8.6	99.9	28	3	31
2,714	1,127	3.841	57.7	24	81.7	63.2	27.3	90.5	40	21	61
9.584	2,342	11,926	126	31	157	138	33	171	70	16	86
6,305	412	6.717	98.9	6.4	105.3	121.7	8.2	129.9	.....	.....	.....
2,449	1,438	3,887	47	28	75	54	30	84.0	12	19	31
1.722	.....	1,722	22.5	.....	22.5	22.7	.....	22.7	14	....	14
2.970	1.387	357	57.7	27	84.7	63.5	31	94.5	25	13	38
6,241	1,316	7.557	82	17.3	99.4	105.2	21.1	126.3	33	9	42
5,558	2,501	8,059	83	37.3	120.3	96.5	43.3	139.8	41	18	59
7,937	1,424	9,361	104.4	18.7	123.1	119.1	20.3	139.4	75	17	92
1.141	206	1,347	34.7	6.1	40.8	38.1	6.7	44.8	.....	...	.....
4.714	335	5.049	90.7	6.4	97.1	116.9	7.5	124.4	54	8	62
4.921	924	5,845	92.7	18.5	111.2	105	21	126	.....	...	.....
15,280	4.981	20,361	202.4	65.5	267.9	235.4	78	313.4	86	33	119
6,737	2,456	9,193	88.6	32.3	120.9	106.2	38.3	144.5	39	18	57
17,876	4,423	22,299	232.8	57.6	290.4	269.7	65	334.7	176	42	218
2,578	531	3,109	36.4	7.6	44.0	39	7.7	46.7	23	2	25
1,179	162	1,341	37.0	6.0	43.0	62	10	72.0	.....	....	.....
265,268	72,226	337,894	3,776.0	1,033.7	4809.7	4359.4	1171.7	5531.1	1,645	534	2179

DURATION OF ATTENDANCE OF PUPILS ATTENDING EVENING SCHOOLS.

SCHOOLS.	FOR 20 WEEKS OR OVER.			FOR 16 WEEKS AND LESS THAN 20 WEEKS.			FOR 12 WEEKS AND LESS THAN 16 WEEKS.			FOR 8 WEEKS AND LESS THAN 12 WEEKS.			FOR 4 WEEKS AND LESS THAN 8 WEEKS.			LESS THAN 4 WEEKS.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Englewood High							17	12	29	40	18	58	63	26	89	17	17	34
North Division High							62	27	89	28	11	39	49	31	80	23	9	32
Northwest Divis'n High							69	34	103	54	14	68	72	16	88	48	6	54
Pullman High							53	10	63	27	2	29	32	3	35	16	3	19
South Chicago High							45	12	57	36	9	45	56	13	69	10	6	16
South Division High							53	25	77	49	21	70	37	18	55	5	6	11
West Division High							80	54	134	48	28	76	75	34	109	33	5	38
Agassiz				9	16	25	13	8	21	42	11	53	43	4	47	85	7	92
Bismarck										25	6	31	57	9	66	35	8	43
Bowen				19	2	21	21	5	26	22	14	37	22	8	30	21	7	28
Brighton							40	8	48	53	8	61	63	6	68	12	1	13
Burr				20	3	23	44	15	59	30	12	42	52	8	60	20	2	22
Dore				6	1	7	32	8	40	47	4	51	61	6	67	27	4	31
Emerson										48	16	64	26	8	34	31	9	40
Froebel				85	25	110	43	10	53	52	3	55	71	4	75	47	2	49
Garfield				41	12	53	138	61	199	142	42	184	101	46	147	138	24	162
Hammond				48	12	60	67	10	77	103	10	113	94	15	109	23	23	46
Harrison							27	4	31	33	13	46	35	5	40	27	5	32
Haven				30	11	41	56	13	69	43	8	51	54	19	73	54	6	60
Hendricks										37	15	52	30	14	44	51	13	64
Holden										53	5	58	61	6	67	60	5	65
Huron Street										53	22	75	49	9	58	6		6
Lyman Trumbull				19	3	22	51	13	64	77	13	90	74	26	100	45	11	56
Montefiore							68	10	78	54	3	57	38	1	39	23	8	36
Newberry										33	25	58	21	5	26	5	4	9
Newsboys' Home				8		8	6		6	10		10	14		14	4		4
Perkins Bass										32	16	48	25	17	42	35	16	51
Pullman				14	5	19	34	10	44	43	7	50	32	6	38	31	8	39
Raymond							46	20	66	38	17	55	28	20	48	25	6	31
Scammon				53	3	56	60	9	69	37	5	42	17	13	30	11	5	16
Scanlan													37	5	42	34	11	45
Seward										119	8	127	76	11	87	89	6	95
Sherwood										47	7	54	50	15	65	82	9	91
Throop				71	28	99	109	33	142	64	17	81	49	19	68	38	14	52
Von Humboldt				12	4	16	41	23	64	43	10	53	52	26	78	42	16	58
Wells				94	18	112	107	28	135	47	25	72	66	8	74	40	6	46
West Division							12	2	14	20	3	23	18	7	25	16	2	18
Hyde Park High Walters'*													62	10	72	6	2	8
Totals				529	143	672	1,393	464	1,857	1,730	448	2,178	1,861	487	2,348	1,330	292	1,622

*School in session only six weeks.

NATIVITY OF PUPILS ATTENDING EVENING SCHOOLS.

SCHOOLS.	AMERICAN.			GERMAN.			SCANDINAVIAN.			BOHEMIAN.			ALL OTHER NATIONALITIES.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Englewood High	115	64	179	3	2	5	6	.....	6	.....	.....	.....	13	7	20
North Division High	97	61	158	30	3	33	23	8	31	.....	.....	.....	12	6	18
Northwest Division High	169	58	227	30	1	31	22	5	27	1	.....	1	21	6	27
Pullman High	90	18	108	6	1	7	6	.....	6	.....	.....	....	26	2	28
South Chicago High	118	37	155	10	2	12	5	.....	5	.....	.....	.....	14	1	15
South Division High	125	70	195	18	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Division High	189	105	294	11	3	14	5	.....	5	2	1	3	29	12	41
Agassiz	114	23	137	35	10	45	18	10	28	.....	.....	.....	25	3	38
Bismarck	63	15	78	21	5	26	14	.....	14	.....	.....	.....	19	3	22
Bowen	81	27	108	10	4	14	6	2	8	.....	1	1	9	2	11
Brighton	163	22	185	3	1	4	.....	.....	.....	.....	.....	.....	1	.....	1
Burr	75	19	94	25	7	32	.....	.....	.....	.....	.....	.....	66	14	80
Dore	88	17	105	6	4	10	1	.....	1	.....	.....	.....	78	2	80
Emerson	74	19	93	10	2	12	7	6	13	1	3	4	13	3	16
Froebel	135	22	157	40	8	48	37	2	39	30	7	37	56	5	61
Garfield	101	35	136	50	14	64	222*	115*	337*	104†	5†	109†	83	16	99
Hammond	126	20	146	35	8	43	15	6	21	145	26	171	14	10	24
Harrison	65	21	86	9	5	14	3	.....	3	1	.....	1	44	1	45
Haven	112	46	158	7	6	13	3	1	4	.....	.....	.....	115	4	119
Hendricks	79	37	116	14	3	17	5	2	7	1	.....	1	19	....	19
Holden	99	7	106	10	2	12	.....	.....	.....	1	.....	1	64	7	71
Huron Street	81	9	90	12	6	18	11	10	21	.....	.....	.....	4	6	10
Lyman Trumbull	132	31	163	25	6	31	47	25	72	2	.....	2	60	4	64
Montefiore	104	12	116	10	2	12	38	4	42	.....	.....	.....	36	4	40
Newberry	34	13	47	16	19	35	.....	.....	.....	.....	.....	.....	9	2	11
Newsboys' Home	42	.....	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perkins Bass	67	35	102	15	2	17	3	6	9	.....	.....	.....	7	6	13
Pullman	78	20	98	15	5	20	33	2	35	3	.....	3	25	9	34
Raymond	91	41	132	15	7	22	11	10	21	.....	1	1	20	4	24
Scammon	86	23	109	11	4	15	3	1	4	2	2	4	76	5	81
Scanlan	38	13	51	2	.....	2	18	.....	18	.....	.....	.....	13	3	16
Seward	168	17	185	8	4	12	.....	.....	.....	2	.....	2	106	4	110
Sherwood	110	9	119	4	2	6	53	20	73	.....	.....	.....	12	.....	12
Throop	92	40	132	10	5	15	.....	.....	.....	148	38	186	81	28	109
Von Humboldt	84	37	121	20	2	22	51	37	88	8	.....	8	27	3	30
Wells	115	34	149	68	23	91	9	3	12	42	2	44	120	23	143
West Division	39	7	46	9	2	11	1	3	4	4	.....	4	13	2	15
Hyde Park High Waiters'	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68‡	12‡	80‡
Totals	3,639	1,084	4,723	623	180	803	676	278	954	497	86	583	1,398	219	1,617

* Russian. † Italian. ‡ Colored.

AGE OF PUPILS ATTENDING EVENING SCHOOLS.

SCHOOLS.	BETWEEN 12 AND 15 YEARS.			BETWEEN 15 AND 18 YEARS.			BETWEEN 18 AND 21 YEARS.			BETWEEN 21 AND 25 YEARS.			BETWEEN 25 AND 30 YEARS.			OVER 30 YEARS.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Englewood High	5	....	5	54	19	73	38	28	66	18	17	35	16	6	22	8	3	11
North Division High	7	3	10	70	38	108	31	17	48	26	10	36	17	7	24	11	3	14
Northwest Division High	16	7	23	127	39	166	65	14	79	20	7	27	8	2	10	7	1	8
Pullman	7	1	8	69	10	79	37	8	45	10	2	12	5	.....	5	.....	.....	.....
South Chicago High	31	9	40	61	24	85	43	6	49	5	1	6	4	.....	4	3	.....	3
South Division High	.....	.....	.....	20	11	31	78	43	121	32	11	43	10	3	13	3	2	5
West Division High	14	10	24	88	47	135	76	23	99	36	27	63	12	11	23	10	3	13
Agassiz	28	5	33	85	15	100	30	7	37	23	10	33	20	4	24	6	5	11
Bismarck	21	12	33	59	7	66	19	.....	19	10	2	12	2	2	4	6	.....	6
Bowen	26	22	48	42	8	50	16	1	17	10	4	14	7	1	8	5	.....	5
Brighton	67	10	77	67	8	75	15	2	17	11	2	13	7	.....	7	.....	1	1
Burr	50	14	64	80	22	102	14	2	16	2	2	4	15	.....	15	5	.....	5
Dore	36	10	46	85	10	95	33	3	36	16	.....	16	3	.....	3	.....	.....	.....
Emerson	24	10	34	50	5	55	9	2	11	5	6	11	7	4	11	10	6	16
Froebel	45	20	65	74	12	86	37	5	42	44	5	49	43	2	45	55	.....	55
Garfield	104	51	155	194	91	285	101	34	135	86	8	94	53	1	54	22	.....	22
Hammond	103	25	128	168	24	192	36	6	42	26	2	28	1	10	11	1	3	4
Harrison	37	7	44	46	15	61	20	.....	20	12	3	15	3	2	5	4	.....	4
Haven	20	4	24	55	13	68	54	12	66	59	10	69	22	4	26	37	14	41
Hendricks	34	14	48	38	15	53	20	7	27	8	2	10	7	.....	7	11	4	15
Holden	51	3	54	63	9	72	18	1	19	26	.....	26	11	2	13	5	1	6
Huron Street	5	1	6	50	20	70	15	3	18	16	5	21	20	2	22	2	.....	2
Lyman Trumbull	82	16	98	83	24	107	37	1	38	31	13	44	22	10	32	11	2	13
Montefiore	76	4	80	42	10	52	45	5	50	12	1	13	8	1	9	5	1	6
Newberry	22	9	31	13	11	24	8	5	13	8	1	9	.....	2	2	7	7	14
Newsboys' Home	14	.....	14	22	.....	22	6	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perkins Bass	19	11	30	47	23	70	16	5	21	5	3	8	3	1	4	2	6	8
Pullman	19	12	31	83	19	102	28	3	31	12	.....	.....	10	1	11	2	1	3
Raymond	17	3	20	58	18	76	27	10	37	17	16	33	13	8	21	5	8	13
Scammon	18	3	21	55	11	66	38	9	47	27	6	33	25	4	29	15	2	17
Scanlan	19	3	22	28	4	32	9	5	14	10	4	14	4	.....	4	1	.....	1
Seward	114	24	138	64	.....	64	54	.....	54	36	.....	36	15	.....	15	1	1	2
Sherwood	23	1	24	42	5	47	56	10	66	31	8	39	22	4	26	5	3	8
Throop	58	34	92	121	34	155	31	16	47	54	20	74	39	5	44	28	2	30
Von Humboldt	37	14	51	64	28	92	31	11	42	25	9	34	22	8	30	11	9	20
Wells	84	38	122	144	24	168	37	11	48	37	7	44	35	5	40	17	.....	17
West Division	4	4	8	40	3	43	13	4	17	6	3	9	1	.....	1	2	.....	2
Hyde Park High Waiters'	.....	.....	.....	.....	.....	.....	10	.....	10	40	10	50	12	2	14	6	.....	6
Totals	1,337	414	1,751	2,551	676	3,227	1,251	319	1,570	852	237	1,089	524	114	638	319	88	407

THE JOHN WORTHY SCHOOL.

As was anticipated, the establishment in the city of the new juvenile court has done much good in keeping from the John Worthy School certain boys who could be more beneficially dealt with by other means. Improvement in this direction has been noted. Notwithstanding the cases diverted by the juvenile court, the number of pupils in the John Worthy School has increased this year.

Membership June 30, 1899	127
Commitments from July 1, 1899, to June 30 inclusive	615
Enrollment	742
Released	447
Membership June 30, 1900	295
Average membership June 30, 1900	176
Average length of time of each pupil (school days)	81

Of the 742 commitments 64 were repeaters (some being sent back for the second, third or fourth time), so that 678 different boys were enrolled.

THE NEW PARENTAL SCHOOL.

The act of the Illinois Legislature taking effect July 1, 1899, which required that a parental school be established in Chicago within two years, marked a momentous advance in the social evolution of our city. The Board of Education was called upon to build, furnish and maintain such a school and to prescribe courses of study therefor. Truants under fourteen, of school age, may be committed to the school for varying periods. Children may be released on parole. Incorrigibles may be sent to a reform school. When such a school is in operation truancy will be rarer than it has ever been.

COMPULSORY EDUCATION.

A detailed report on this subject has been laid before the Board by Superintendent Bodine, and printed in the minutes of date June 27, 1900, beginning on page 554. I may therefore limit myself here to the remark that the work of Superintendent

willing, unquestioning compliance with the rules of the school and the judicious regulations of the teacher has become, with the great majority of pupils, a matter of pleasure as well as of duty. This sympathy, too, is inciting a multitude of pupils, older as well as younger, to the performance of more earnest, more conscientious and more successful work in every department of school activity. Through the influence of sympathy, not only is respect for the laws of the school increasing, but self-respect and self-control, than which there is no better preparation for good citizenship.

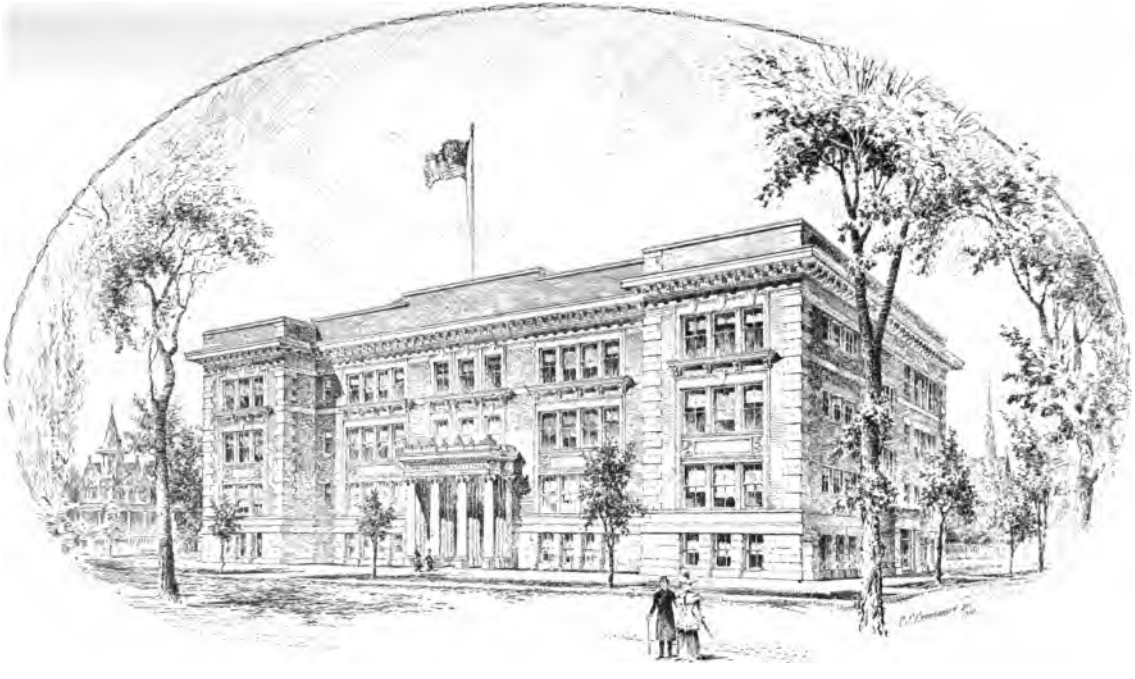
In one of the schools of the district the principle of self government or of pupil government, has been so long and so successfully applied that its value in the management of a school cannot be reasonably questioned. In other schools the same principle has been adopted with excellent results. It must not be supposed that in schools in which pupils largely govern themselves no infractions of law ever occur. As well assume that in the best organized and most intelligent society universal rectitude can always be found. In the one case as in the other, while obedience to the law and respect for the right are the general rule of life and conduct, exceptions to the rule now and then occur.

In self governing schools, pupils constantly stimulated and encouraged by sympathetic principals and teachers are beyond doubt acquiring a tenacity of moral grip and strength of moral fiber which in later life will be of great service to themselves and to society.

There are but few school rooms in the district which are not decorated to a greater or less extent with beautiful pictures. These pictures were procured in various ways. Some were purchased with the proceeds of school entertainments, some bought by the teachers, some presented by friends of the schools, some loaned by the Public School Art Society, which has been especially generous in providing pictures for schools whose pupils seldom or never see a thing of beauty outside of the walls of their school rooms.

The special teacher of drawing in the district, by advice and suggestion, has most heartily and efficiently co-operated with the regular teachers in their efforts to surround their pupils with the refining and elevating influences of beauty.

Meetings of the district principals in which educational principles and methods were freely, extensively and intelligently discussed, were regularly held during the year. The beneficial effects of these meetings were clearly perceived in the improved work of many school rooms. Meetings of grade teachers in which real



JOHN C. COONLEY SCHOOL.

Belle Plaine Ave. and N. Leavitt St.

class work exclusively occupied the time were a very valuable feature of the work of the year. Such meetings and exercises were inspirational in a high degree.

Principals and teachers are heartily commended for their earnest, conscientious and successful work.

EDWARD C. DELANO.,
Superintendent District 4.

REPORT OF DISTRICT SUPERINTENDENT A. R. SABIN,

IN CHARGE OF DISTRICT NO. 5.

This district lies south of 12th street and is divided into two nearly equal sections by the C., B. & Q. railway.

The schools north of the tracks in their order from east to west, together with the average daily membership of each for the school year are as follows:

Foster, Union and O'Brien streets	1,965
Washburn, Union and Fourteenth streets	1,517
Garfield, Fourteenth place and Johnson street	1,300
John M. Smyth, Thirteenth street and Blue Island avenue	1,186
Rogers, Thirteenth street and Center avenue	612
Medill, Fourteenth place and Throop street	858
Clarke, Thirteenth street and Ashland avenue	1,301
Gladstone, Robey and Twelfth place	750
Brainard, Hoyne avenue and Twelfth pl	690
Chalmers, Fairfield avenue and Twelfth street	1,202
George Howland, Sixteenth street and Spaulding avenue	1,018
Bryant, Thirteenth and Forty-third streets	911

South of the tracks the schools arranged in the same order are the following:

David Swing, Spring and Seventeenth streets	832
Walsh, Twentieth and Johnson streets	1,278
Eighteenth Street, Eighteenth and Morgan streets	497
Throop, Throop and Eighteenth streets	906
Longfellow, Throop and Nineteenth streets	708
Komensky, Throop and Twentieth streets	884
Jirka, Seventeenth and Loomis streets	1,104
Cooper, Nineteenth street and Ashland avenue	979
Whittier, Twenty-fifth and Lincoln streets	931
Froebel, Twenty-first and Robey streets	1,198
Pickard, Twenty-first place and Oakley avenue	1,222
Hammond, Twenty-first place and California avenue	869
John Spry, Southwest boulevard and Twenty-fourth street	1,240
John Worthy, California avenue and Twenty-sixth street	186
Farragut, Spaulding avenue and Twenty-third street	1,078
Lawndale, Central Park avenue and Twenty-fifth street	495
Corkery, Crawford avenue	392

The total enrollment of the district was 32,134.

A kindergarten department has been provided for at the Foster, Smyth, Medill, Clarke, Chalmers, Geo. Howland and Bryant. It is to be regretted that this provision does not extend to the Garfield and Washburne, since the Russian Jews who largely attend these schools are generally without English on entering school.

In the southern or Bohemian section of the district the crowded condition of the schools has been such for the past ten years that it has been impossible to provide room for a kindergarten except in the newer buildings. Hence the fact that the Jirka, the Pickard and the Farragut alone of all this section have a kindergarten is accounted for without the least implication of neglect or oversight on the part of anyone. The Cooper, Hammond and John Spry have each a ground floor room designed for kindergarten use. An addition to the Froebel should provide for the department there, and the new building to be erected for the Eighteenth Street School should afford such relief as to make it possible to provide for this department at the Throop, Longfellow, Komensky and Walsh.

Hundreds of children in this section are still entering school without a word of English. With a kindergarten as a part of the environment of these little ones they will get English words for most of their intuitions before they are six years old. This is not a theory—a sentiment merely—it is a fact that has been proven. Hence adequate provision for the kindergarten in connection with all schools where English is not the language of the home is the paramount need, as was indicated in my report a year ago.

The manual training centers of the district are at the Medill, Froebel and Hammond. These centers should at least be multiplied by four. There is involved a too great waste of time in going to and from these long distant centers. Provision should be made for manual training in all the large schools and then let the teachers of the department do the walking, as the special teachers have always done.

The district has two cooking centers, at the Clarke and at the John Spry. It is greatly to be desired, I think, that adequate provision be made for the 7th and 8th grade girls throughout the district in this department of household arts. Cooking needs to become a fine art, even as drawing. What is necessary to make it such is the instruction that has been afforded during the year at the Clarke and John Spry.

Two teachers of sewing have been constantly employed during the year with most satisfactory results.

Of the drawing department, it may be said, such is its efficiency "that each to-morrow finds us farther than to-day." It has not

only decorated the schools but planted in them a love of the beautfiul that is destined to tax the best efforts of the department in all time to come to satisfy.

Mrs. Miller, of the drawing department, has been the recognized leader, but so ably has she been supported by principals and teachers that her labor has been a joy and rejoicing.

If the music department has not decorated the schools it has nobly accomplished its mission—that of making the school life of the children one joyous song. In most of our school work the individual is the unit. In the singing exercise the division is the unit. The individual counts for nothing. A choir boy may have the voice of a seraph, but in school he is only one of a row of boys. Here it is all or nothing. We are glad if a dozen pupils of a class distinguish themselves in drawing, language or history. Why not be proud when fifty children sing a song delightfully? Maybe we are not as proud of our good singing as we might be, for the good of the service. An opportunity for putting the singing of the district to a test was afforded in May.

The eighth grade divisions were invited to give a song recital in the Medill Hall. Each school was permitted to sing three songs of its own selection. The songs took a wide range and in the aggregate made a programme in every way excellent from a musical standpoint. Each class was led by its own teacher. The singing of each class was praiseworthy. The pupils' enjoyment throughout the long afternoon was manifest, and, much to my satisfaction, their applause was as discriminating as might be expected from an audience in Central Music Hall. The songs they liked best were the best songs.

The facilities for physical training afforded by the schools add much to the efficiency of the physical culture department. The daily drill is helpful in many ways.

The school work in this district has for ten years been in accord with the graded course adopted by the Board of Education, as interpreted by the District Superintendent, in close and cordial relation with his principals. All of the text books adopted by the Board of Education have been in constant daily use during this period. Whenever pupils have failed to make a grade in a year it has been owing to a lack of English, a lack of normal intellect, defective physical strength, or irregular attendance. Very seldom indeed has it been owing to inadequate instruction.

In the correlation of studies language has had its rightful place as the center. As the language habit is conditioned by the reading habit, reading has had the largest place of the three R's. There

is time in the school program for instruction and example in connection with the subject of reading, but by far too little for practice, which is the pupil's part. If the school arithmetic were never permitted to invade the home and the Reader were put in its place our reading might be better and the homes happier.

Grammar as an aid to the language habit has received attention consistently from the fourth grade up in connection with the text books in use.

History and geography contribute valuable material for written language and these have been laid under contribution. Drawing as a mode of expression is nearly as valuable to language as to its own mode.

Nature study in the primary grades has been exceedingly helpful to both oral and writtten language. And yet our pupils fail in English in the High Schools. When all of our children from eight years of age upward can read entertainingly in the home, then may be predicted the jubilee era for language.

A meeting of the Principals has been held each month, the meetings being held at the different schools throughout the district. One hour has been regularly devoted to school visitation and an hour to discussion or conference. The visiting hour has helped to unify the work as a district. The conferences aimed to find a reasonable basis of justification for what we were doing. Let it not be inferred that in seeking to unify the work of the schools there was a latent purpose to detract from the individuality of the principal. On the contrary, the individuality of the visited principal was as manifest to the visiting principals as to the superintendent. There was nothing hidden.

Grade meetings have been held numerously through the district, in which every subject of the grade has been repeatedly discussed.

I count it a high privilege to be a witness to the fidelity of the principals and teachers of the district.

A. R. SABIN,
District Superintendent.

Owing to the death of Mr. James Hannan, District Superintendent in charge of the Sixth District, no report from his district can be presented.

REPORT OF DISTRICT SUPERINTENDENT LESLIE LEWIS,

IN CHARGE OF DISTRICT NO. 7.

I herewith submit my annual report for District No. 7:

PRINCIPALS' AND TEACHERS' MEETINGS.

There have been eight meetings of the Principals of the district during the year. At these meetings we have considered matters of local interest and discussed general pedagogical principles. The principals have been given the utmost liberty consistent with a unity of our system, and at our meetings they have entered into the discussions of the different subjects without restraint. Naturally there were wide differences of opinion and the animated presentation of these differences has been conducive of much good.

Each one was conscientiously seeking for the truth and looking for those methods that would secure the best results in his school, and this interchange of ideas and plans tends to stimulate to greater and wiser efforts as well to the correction of errors.

There have been also a number of meetings of the teachers of the district by grades. The schools of the district are so widely scattered, and the means of transportation so poor, that it has been found almost impossible to call all of the teachers of any grade together at any one place. It is so far from the outlying schools to the most central point that it was necessary to close rooms for the whole afternoon whenever there was a teachers' meeting. This was not considered wise and the teachers were divided into groups, one at the north end of the district meeting at the Healey School, one in Englewood meeting at the Carter or Lewis School and one at the Curtis School in Kensington. This made a large number of meetings for the Superintendent and special teachers, but it was a great saving of time to the pupils.

At some of these meetings pedagogical theories and principles were discussed, while at others methods were illustrated and results shown by classes of pupils. It is a great strain on the average teacher to conduct an exercise in the presence of a hundred or more critical spectators, but no one who was asked to conduct such an exercise shrank from her duty. Each one showed what her class could do with so much earnestness, enthusiasm and skill as to win the admiration of all the teachers present. In several instances these exercises were repeated a day or two afterwards in the presence of the parents of the children. These institutes were a source of inspiration to the teachers.

Any one who has been connected with our schools for a number of years and carefully watched the growth of the pupils from childhood to manhood, has seen the gradual development of their

mental and moral powers and has followed these same pupils until they assumed the responsibilities of real life must be impressed with the fact that a large number of them are disappointed and dissatisfied.

Their education has not done for them what they thought it was going to do, and hence there is a widespread feeling of dissatisfaction and unrest. The fault is not so much with their education as with their wrong ideas of life and wrong conception of what their education will do for them. Most of the children think that when they have acquired such an education as can be obtained in our public schools they will be able to secure employment in the so-called genteel occupations. Large numbers of them seek such employment and are disappointed. They are either not able or not willing to work with their hands. All kinds of manual labor become distasteful to them. Hence it is that our so-called genteel occupations are very much overcrowded.

It is true that this is a sociological rather than a pedagogical question, but it is so important that we, as educators, cannot ignore it if it has any bearing, directly or indirectly, upon the work of our schools. Surely the only work for our schools is to make useful citizens out of the children committed to our care. This is the only excuse for their existence and public support, and it is our duty both to seek the matter to be taught and that method of teaching it that will bring about the desired result. It is more and more evident that children from the first to the last day of school life, be it long or short, should be inspired with the idea of the dignity of labor. They need to learn and learn thoroughly, that honest labor, of whatever kind, is always honorable and that dishonest labor and idleness are alike dishonorable. What we need to-day is broad-minded, intelligent, cultivated mechanics and artisans. They are needed in church and state and society. A man needs an education not that he may lift himself out of the position which he occupies but that it may enrich and ennoble his life in his position. It is possible that in our desire to stimulate our pupils to greater efforts and to persuade them to remain longer in school, we have held out unwise inducements and caused them to make for themselves ideals which they can never even approach. Pupils' ideals are largely the product of the teacher's work, and in many cases whether they be wise or unwise depends largely upon us.

If a teacher really believes that manual labor is as worthy of respect as any other labor she may do much to correct the false impressions that so many children now have and lead them into useful and profitable walks of life.

Again would it not be well for us to consider whether our instruction ought not to be more along the line of industrial education? Manual training and cooking and sewing are steps in the right direction, but we have just made a beginning in these branches. Manual training should be within the reach of all the boys in the grammar grades, because, if for no other reason, the boy who has worked at the bench, the lathe and the forge will have in after-life, whatever his position may be, a broader and more just view of the relations of one class of men to another than he who has never had such work.

In conclusion, I wish to enter my protest against the unjust criticisms that have been made upon our teachers as a class. These criticisms have been so general that many of our good citizens have been led to believe that our teachers are poor and unworthy of their positions—that they have obtained and continue to hold their places through political pull. It is not true. That all are equally strong is not possible—that a few are comparatively weak is doubtless true—but the great mass of them are intelligent, well educated and progressive teachers. Large numbers of them are studying every year, not for honors or degrees, but that they may be able to do better work in their school rooms.

Not one of them claims to be perfect; not one claims that her teaching is so good that it cannot be made better. Wise and just criticism is healthful and no one objects to it, but general wholesale criticism does no good and but little harm.

Respectfully submitted,

LESLIE LEWIS.

District Superintendent, District No. 7.

REPORT OF DISTRICT SUPERINTENDENT ALFRED KIRK,

IN CHARGE OF DISTRICT NO. 8.

I have the honor herewith to submit report of the condition and work of the schools in District No. 8 for the year 1899-1900. The more direct management and work by the principals and grade teachers have in the main been efficient and praiseworthy. Methods of discipline have been humane, and the recognition of the rights of pupils has ever been prompt. Methods of instruction have been carefully studied and faithfully put into practice more or less in the school room. Diligent endeavor has been made to maintain the former efficiency in the work of the district. Meetings of principals

have been regularly held during the year, at which educational questions have been proposed and discussed both by them and the District Superintendent. Ways and means looking to the greater efficiency of the schools have been taken up, and discussion of the same have engaged the attention of these meetings in the hope that some more intelligent and rational conclusions reached whereby a more satisfactory disposition of the educational forces might be discovered and exemplified in the better education of children. Discussion and reflection as to the nature of the work, the intellectual demands of the passing hour, the paramount needs of the children have borne fruit in the greater adaptability of means to ends, and in the more rational and human development of the child side of the school.

THE VALUE OF INSTITUTES.

Mr. Rice, a few years ago, in a series of articles bearing upon educational problems, emphasized the proposition that the value of a visiting superintendent to a school or a system of schools lay not so much in his visits thereto and presence in the school room as in the opportunities afforded him to meet the teachers frequently in institutes, where the superintendent could be enabled to act as counselor as to methods, a director of machinery,—for of necessity there must be machinery more or less in every organization school systems as well. The superintendent is thereby afforded the occasion to impress upon the teachers his own personality, or rather to give point to their own individuality, to establish among them a common bond of sympathy, to set before the underlying principles of educational doctrine, to hold up a high and ideal standard of service, and to a study of the conditions and requirements of child-growth, and their obligations to fulfill to the utmost the value and potency of these conditions. Institutes are seasons when the superintendent may voice, in a manner always courteous and kindly the criticisms called up by his observation in the school room, for while it is well to hold up the picture of finer and more spirited ideals it also, less frequently it is true, is essential that the mirror of imperfect and faulty work be brought before the consciousness of the teacher. It would thus appear that institutes constitute a most valuable and important feature of the school work, and should be encouraged, fostered and made occasions for the re-creation of the teacher. Believing as I do in the efficacy of institutes, I have met the grade teachers as well as the principals regularly during the year. At these meetings, methods of instruction, methods of dis-

cipline, methods of general management, the relations of teachers to pupils, to parents, to principals, and to each other, have constituted the chief features of counsel and interchange of opinion. It is to the credit of teachers that while differences of judgment in detail were noted, yet a substantial agreement as to the main points obtained. I beg leave to accord a large meed of praise to the grade teachers for the earnest spirit they have manifested by their attendance and co-operation in the consideration of measures looking to the furtherance of greater efficiency in their special work.

SCHOOL COUNCILS.

A parallel agency for working out the educational problems connected with our system of schools, is the system of school councils organized about three years ago for the free and aggressive discussion of purely school questions. Dr. Andrews, in his first report, paid a very complimentary tribute to the purpose and spirit of these councils, ranking them among the foremost agencies for the upbuilding of a professional spirit among the teachers. These councils are the first, if not the only, organizations of the kind in American school systems. They were suggested and organized in a laudable spirit to meet and consider, in a fair and thoughtful manner the educational questions of the day. They are maintained in the same spirit to encourage thinking, promote professional activity. They excite to inquisitiveness in every form and department of pedagogic science. For these reasons and others that might be adduced they are worthy of the heartiest support of the entire educational force of the city, including the Board of Education.

SCHOOL BUILDINGS.

Owing to the labor strike, of unusual magnitude, the work on the Calumet Avenue School, the new Springer School and the Eighty-third Street School has been greatly delayed, and the school work has in a great measure suffered in some degree something akin to a relapse, because of a necessary resort to double divisions unusual in extent, and to the occupancy of rented rooms, without means of proper light and ventilation. The Calumet Avenue School has been especially unfortunate, for the reason that pupils up to and including third grade classes have been deprived of their full daily sessions, and the higher grades have been furnished rooms in adjoining school districts, being thus obliged to walk long distances to and

from their homes. Nearly one-half of the pupils attending the Eighty-third Street School are very inadequately housed in rented quarters located more than one-half a mile from the main building. These quarters are unsuited to the physical demands of children because of insufficient light and ventilation, and during inclement weather the presence of water in basement and about the same quarters are a serious menace to the health of both teachers and pupils. It seems more than unfortunate—even criminal, as Dr. Christopher characterizes the situation—to subject young children and their teachers to such straits for pure air and sufficient light, were it not that the Board of Education is helpless in the matter. A similar condition of things obtains on the ground and the branch of the Springer School, and calls aloud for correction.

In this connection I take the liberty to recommend that an addition, say of eight or ten rooms with an assembly hall, be made to the M. W. Fuller School building, to provide in a suitable manner for pupils who are now crowded into a building adjoining the main building, and which was once used as a dwelling house, and in which the accommodations are greatly cramped, the rooms, four in number, being small and so arranged that pupils must face one or more windows to the injury of their sight. Further, it will provide for pupils now in rented rooms, nearly three blocks away—formerly a dwelling— and unsuited. I further recommend the erection of an addition to the J. L. Marsh School, at 101st and Escanaba avenue. Two of the rooms in this building were never intended or constructed for school rooms, and are inadequate for the accommodation of the pupils.

MANUAL TRAINING.

Because of a still stronger conviction of the inherent value of manual training as a large and determining factor in intellectual training, I renew my recommendation of one year ago, that manual training be not only made a constituent part of the curriculum in every school in the city, but that provision be made for its introduction into all the grades of the schools. That manual training increases the producing and thus the earning capacity of the individual, while a powerful argument in support of its commercial value it fails to take notice of the higher potency, the intellectual phase of life, for the conviction is next to universal that manual training is more than hand training, it is sense training in a more extended sense; it implies comparisons, study of relations and adjustments, and the formation of accurate judgments, the very essence of effective thinking.

Whatever of excellence has been achieved in the administration of school affairs in the district; whatever of healthy advancement in things that make for character through educational methods in the school, I freely give credit to the principals and teachers of the district who have so generously held up my hands in the labors of the year.

Permit me, Mr. President, to extend to you and to the members of the Board my grateful acknowledgments for the courtesies of the year.

Respectfully submitted,
ALFRED KIRK,
District Superintendent.

ANNUAL REPORT OF THE SUPERVISOR OF MODERN LANGUAGES.

Dr. E. Benjamin Andrews, Superintendent of Schools:

Dear Sir: I herewith respectfully submit the following data touching the work in the Modern Language Department during the past year.

German was taught in the four upper grades of the elementary schools and in the high schools. The average number of pupils studying German was 34,232 out of a total enrollment of 40,225, of which number 15,140 were of German parentage, 12,295 of Anglo-American, and 12,790 belonging to other nationalities; with a corps of teachers of German employed in the elementary schools of 212 instructors; those in the high schools numbering 25 who gave instruction to 2,528 pupils in the high schools.

The study of French was pursued in the high schools by 1,425 pupils, and the study of Spanish by 78.

The study of modern languages is becoming more and more general in this country as well as in European countries. In Germany the time heretofore given to the study of Latin and Greek has been cut down to a considerable extent and the study of English made obligatory. This is but one instance where the study of modern languages has been recognized as of vital importance.

I wish here to give the opinions of several noted educators of our time, in addition to those quoted in my former reports, as to the value of the study of the German language in our public schools. The German language is near to us. It can be fairly well mastered. It has a noble literature, and the language is a usable one.

"In the German language we are brought into the life of a peo-

ple our children can understand, a people who are accustomed to go to the heart of things, a people of gentle fancy and romantic ideals, a race that it is in every way good to know, and best of all because it is possible for us to know them well, to annex their broad world to the extent of our own."—David Starr Jordan, President Stanford University.

"As Latin was the language of the scholars during the middle ages, so the knowledge of German is now indispensable for any one who claims the name of a student and scholar."—President Gilman, Johns Hopkins University.

"This kinship of English with German being original and fundamental—not secondary or derived, as in the case of French, or Latin, or Greek—naturally pertains to the most elementary and indispensable part of our language. The whole ground work of English is Germanic in origin, and—so far as grammatical form remains—Germanic in form. The most essential grammatical elements including all inflections (with perhaps a single exception, though even this is doubtful); all auxiliaries used as substitutes for inflection; almost all numerals; all pronouns and pronominals; our common prepositions and conjunctions, on which turn the hinges of discourse; that most important group of strong forms in nouns, adjectives, verbs, which furnish the simplest terms of daily speech; the most familiar affixes of derivation or word-building; in a word, the most primitive and important elements of form, of construction and of idiom—all this bone and sinew and structure of English is, with rare exception, of Germanic origin. Besides this the great majority of our simple monosyllables and their derivatives expressing the objects, ideas and feelings of common life and experience, and constituting the most indispensable and universal part of our vocabulary, are also Germanic. . . . . Humanity would not be poor with German and English literature alone: if either were lost the modern world would suffer spiritual eclipse; if both were gone, there would be midnight darkness, with here and there a star. I need not speak of the importance of literature to the individual—to a people—to mankind. . . . . I will only add that no man who—outside of the mother tongue—feels the need of literature, whether for instruction, for inspiration, for use, or even for delight alone, can afford to be ignorant of the German."—Dr. Edw. S. Joynes, University of South Carolina.

" . . . . . The claims of a language as a discipline in our national education must be more stable, must, in a word, be a cultural staple in our national life. This is the indisputable claim which German has to recognition in our national schools, to the

Universities, Colleges and High Schools alike. It is the culture which the German language unlocks that is essential to the well rounded education of the American citizen. . . . . The whole course of American life has been changed by our touch with Germany. Our population has been mixed with a strong current of German blood. Our literature came into being at the touch of German thought. Our philosophy, theology, science and education have been transformed by the magic of German ideas. We have, in a word, become or are becoming more German than Greek or even Latin. This is the supreme, unanswerable argument for the introduction of German into our popular education."—Prof. M. D. Learned, University of Pennsylvania.

"In actual practice, of course, it is almost inevitably found necessary to limit one's ambitions in the direction of language acquirement. It is seldom, in America, that time and opportunity allow for the actual acquisition of more than one language in addition to one's own. In that case, there is no question in my mind as to what that language should be, any more than there would be a question in Germany, under similar conditions of choice, as to the language there selected to be thoroughly mastered.

"In America, under such circumstances, it would certainly be German, just as in Germany it would surely be English. Armed with these two weapons one has at his disposal an astonishing part of the whole, wide field of human culture and of successful human endeavor. We in America, nevertheless, are only just beginning to recognize the inherent desirability of the choice I have indicated. Statistics that have recently been assiduously gathered from all parts of the country show conclusively, however, that in language-teaching the tide is now strongly turning toward German in the facilities of instruction and the numbers of the instructed, and this, as I understand it, is the most unmistakable concession to the innate value of the subject that could possibly be adduced in a time of such careful scrutiny of the school and college curriculum as the present.

" . . . . If I have seemed to speak of the value of a knowledge of German in addition to English in the preceding paragraphs more from the standpoint of general culture than of the practical application of such knowledge in the actual business of existence, it is not because that side of the matter does not exist. In point of fact, there are almost innumerable instances in America when the value of the possession of the two languages may be expressed in the most material way, in terms of actual dollars and cents. In all of the larger cities, on account of the German popula-

tion which still is inherently German, there are opportunities in plenty in the legal and medical professions that are not readily accorded a lawyer or physician who speaks English only. . . . . In many branches of trade, a knowledge of the two languages is necessary to a conduct of the business. . . . . This is true, furthermore, of insurance companies, of banks, and of many other branches of business in which bi-lingual correspondence clerks and stenographers are needed as a necessary part of equipment. These conditions, too, are increasing, rather than diminishing in number and in value, and will continue to increase with the dominance of the English and German speaking nations."—Professor William H. Carpenter, Columbia University.

"In general, it is safe to assert that the average boy or girl of twelve will take more kindly to French or German than to Latin. The modern language is easier and more interesting. It seems more real and practical. Progress is more rapid. The value of the Latin has to be taken on trust, that of the modern language is more obvious to the juvenile mind. For the children of twelve the Latin grammar is a very severe study. It means usually for many months little more than a loading of the memory with paradigms, a blind investment of labor for the sake of a mysterious profit which the learner cannot comprehend. The elementary reading matter is usually dull stuff, devised to illustrate grammar. Up through Caesar's Commentaries there is almost nothing to touch the feeling, to feed the imagination, to suggest a real connection with the pupil's own life. It is all a grind; in its time and place, to be sure, a very useful grind. We believe in it heartily. But the question is whether for children of twelve it is not best to break the force of the initial impact with Latin by using a modern language as a butter."—Report of Committee on College Entrance Requirements, July, 1899.

The political and social phases of the question are presented in the subjoined extracts:

"No public institution is established on a firm foundation so long as it is beneficial only to a small class of the community. The introduction of German into the schools makes them useful to a greater number, and hence more stable. . . . . The German-American is obliged to learn two languages. For if his children learn English only there must be a too sudden and abrupt breaking off of the continuity of race, and a consequent great evil wrought upon the character. The consciousness of the history of one's ancestry, the influences derived from communication with the oldest members of one's family, are very potent in giving tone to the

individuality of youth and ripening age. This continuity of history is a kind of solid, substantial ground for the individual, and from its soil spring up his self-respect and aspiration.

"A class of immigrants who had no desire to preserve a relation with their family stock would bring calamity upon the community into which they came."—W. T. Harris, U. S. Commissioner of Education.

"No patriot need fear that the retention of German in the family of the emigrant will impede the acquisition of the English language. Quite to the contrary, it is a pity that in the second generation of our German-American children the German language is often completely lost. I say it is a pity, because a fair knowledge of a second language is a mental treasure of great value. . . . .

"The thought that the conservation of the German beside the English language might retard the development of patriotism is as silly as if you would say it might make us less patriotic if we would sing 'Hail Columbia' in two languages. There are thousands of English speaking Americans who learn German. It does not make them less patriotic; it makes them more cultured and intelligent. They learn German because they appreciate the value of that language. . . . ."—Carl Schurz.

The non-regardance or discontinuance of German instruction in the public schools would be followed by very serious and most unpleasant consequences, to be sure, since the Germans, being now strong supporters and friends of these schools, are numerous, and since they, under all circumstances, will resolutely hold to their mother tongue. It would virtuallv mean nothing less than to drive away thousands of children from the very schools which are existing and upheld for the purpose of educating every youth, and which, therefore, should so far as possible, be arranged in conformity with said purpose.

And since this again would absolutely involve a protraction of the process of amalgamation, it is all the more obvious that the abrogation of German in our public schools would be neither fair nor prudent.

That the study of the language should begin as early as possible, and that it should have a period devoted to it each day, are facts that have almost become axioms.

"At eight years of age the French boy begins to study a foreign language, either English or German; the American boy begins to study a modern language five years later, at thirteen, when the best period for learning a foreign tongue is already passed."—Chas. W. Eliot, President Harvard University.

"The shiftless, slip-shod instruction that boasts of teaching any language with two lessons a week, during a single academic year must naturally tend to make a slouch of the otherwise honest, enthusiastic student, and turn into a conceited charlatan the pupil who, for lack of previous sound training, is disposed to skim over his subjects."—Prof. A. M. Elliott, Johns Hopkins University.

"To learn to speak any language in any decent manner demands long and assiduous practice in speaking. To learn to speak it at all well demands long association with those who speak it as their native tongue. And this requires time. To learn to read a language, again requires long practice in reading. One must have read a large number of books from different periods of the language. He must have acquired some first hand familiarity with its literature. And this, again, requires time."—Prof. Calvin Thomas, Columbia University.

"Classes should be as small as possible, and there should be at least one exercise on every school day. Infrequent lessons in large classes amount to nothing. It is important that the teacher know his pupils intimately and be able to adapt his instruction to their individual needs. The general aim should be to familiarize the learner with the vocabulary and phraseology of the spoken language, and to teach him to express himself readily and correctly in easy sentences.

" . . . . The average graduate of an American high school is of about the same age as the average graduate of a German gymnasium, but the latter is farther along in his studies and better prepared for higher work. We have, therefore, to consider the problem of strengthening the preparatory course, while recognizing that the ordinary four-year curriculum can bear no further burdens, and should, if anything, be simplified. Of this problem the obvious solution is to begin the proper work of the high school at an earlier date. Instead of dividing our educational years into eight primary, four secondary, and seven or eight higher, we should divide them into six primary, six secondary, and six higher.

" . . . . It may also be remarked, finally, that one who wishes to acquire a modern language thoroughly will always do well to begin in childhood. The latter period of youth is distinctly a bad time to begin. In childhood the organs of speech are still in a plastic condition. Good habits are easily formed; bad habits more easily corrected. The mind acts more naively, and memory is tenacious of whatever interests. Forms of expression are readily mastered as simple facts. Later in life, in proportion as the mind grows stronger, it also grows more rigid. The habit of analyzing

and reasoning interferes more or less with the natural receptivity of the child. The fixation of speech habits in the mother-tongue makes it increasingly difficult to acquire even a moderately good pronunciation, and perfection is usually out of the question."—Report of Committee on College Entrance Requirements.

A renewed interest in the study of French was awakened probably, as many of our pupils and teachers anticipated, visiting the Paris Exposition. We endeavor to make the course as interesting and as practical as possible by selecting texts by modern writers in which the French language is given as it is at present spoken.

Spanish was introduced this year as an experiment into three of our high schools. The interest shown by the pupils was all that could be expected, but whether the language will be of sufficient benefit to the pupils to give it a permanent place in our high school course of study, I am not at this time prepared to state. The lack of opportunity to make use of this language outside of the schools here in the city will tend to limit its study to a comparatively small number of pupils.

The introduction of German into the Normal Practice School, and the purchase of German supplementary readers had to be postponed, but it is hoped that before the end of another school year German will be added to the course in the Normal Practice School, and thus enable pupils who desire to teach German in the elementary schools, to prepare themselves more thoroughly for their work. It is also hoped that supplementary readers may be purchased in the near future as we are greatly in need of them.

In conclusion, I desire to express my gratitude for the hearty co-operation given me by the members of the Committee on German, and the Superintendent of Schools, as well as for the faithful work of the teachers in this department.

G. A. ZIMMERMANN.

REPORT OF HENRY SUDER, SUPERVISOR OF PHYSICAL CULTURE.

Dr. E. Benjamin Andrews, Superintendent of Public Schools, Chicago, Ill.:

Dear Sir: I herewith respectfully submit to you my annual report concerning Physical Culture in our public schools.

During the spring months before closing of schools in 1899 the Committee on Physical Culture recommended the equipment of the Englewood High and Lake View High Schools with gymnasiums. The Board of Education granted the equipment and the

work was carried out during the summer vacation. Both gymnasiums have an equipment of the best modern apparatus, including shower baths and weapons for fencing exercises. The apparatus are numerous and are arranged so that even a large class can practice the given exercise at the same time. Although such an equipment is expensive, it pays in the end because the instructor can supervise the class better and much time is gained.

Volunteer classes of boys and girls exercise twice weekly in every high school gymnasium. In the Lake View High School more than one-third of the pupils enrolled took part in the voluntary lessons after school hours.

Field-days were arranged by classes of different schools. One of the most successful was that of the Lake View High School on the grounds of the Ravenswood Athletic Association.

During the past year credits were given to the pupils of the high as well as elementary schools by order of the superintendent for their work in physical training, and I consider this an important step in the advancement of physical culture.

The number of instructors in high schools was increased from seven to nine, which was due to the opening of the new high school gymnasiums, while the number of instructors in the elementary schools was decreased from eleven to eight, on account of lack of money.

How favorably the Committee on Physical Culture thinks of the advancement of physical training may be shown by the fact that a recommendation was made to the Board by said committee to provide every new school building with a place for a gymnasium, and to increase the number of instructors from eight to thirty. On account of the lack of funds the latter part of the recommendation could not be granted.

Although the number of teachers of physical culture is too small to carry on the work satisfactorily, the present force of instructors and the greater number of class teachers try their very best to give the pupils the so important part of modern education, systematic physical training.

Thanking you for your kindness, I remain,

Very respectfully yours,

HENRY SUDER,

Supervisor of Physical Culture.

REPORT ON VACATION SCHOOLS.

Dr. E. Benjamin Andrews:

Dear Sir: I wish to submit to you the following report on Vacation Schools for the year '99.

Four schools were opened for six weeks during July and August, accommodating 1,600 children at a total cost of $3.15 per pupil, the money being furnished by the Women's Clubs of Chicago and vicinity.

In the schools were taught, on the "departmental plan" without books, music, art, nature study, physical culture, manual training and sewing.

We took the children on thirty-two excursions, including trips to parks, farms, natatoriums and lake ports.

School sessions were from nine to twelve, with daily half hour conferences with the teachers. Every two weeks parents of the children came to inspect the work and talk over future plans.

The vacation schools have a two-fold purpose: 1. To enrich the experiences of the children by giving them a systematized vacation. 2. To keep them from the evil influences of the street. To be most helpful they should be supplementary to the regular schools and experimental in their character. They should be the harvest time for impressions and a seedtime for ethical, moral and social ideas. The freedom of teachers and pupils under new circumstances and environments cannot help but be beneficial to all. Fossilized notions of routine work are obliterated and life substituted.

Success of the schools depends upon the employment of trained teachers. Previous experience in vacation schools should count much in the selection. The choice and preparation of the teachers is at present the great problem. A teacher who can teach six weeks in a vacation school without experiencing a revolution in ideas is either unfit for the place or a pedagogical prodigy.

O. J. MILLIKEN,
Superintendent of Vacation Schools.

MANUAL TRAINING IN ELEMENTARY SCHOOLS.

December 10, 1900.

Dear Sir: It is a healthful sign, when interest in a subject does not flag but grows. This, I believe to be the present condition of our schools on the subject of Manual Training. The movement for the introduction of manual training into all the city schools, as a

corrective to an excess of book work seems to be gaining strength. It is felt that the exercise of hand and eye, as well as of the memory and the powers of verbal expression, is necessary to true education.

It appears to be true that a child's mental capacity is increased by manual training, and that it promotes the attainment of power and accuracy in other studies. The hand as the seat of the sense of touch is invaluable in the business of gaining information.

A one-sided manual training, however, that would lay exclusive stress on the development of manual dexterity, or that would subordinate all other considerations to the training of the hand, would become as pernicious as the traditional school which sees in man only a getter of information. On the other hand, a manual training which would lay exclusive stress on tool work would debase man into a part of a machine; while a manual training that only takes into consideration the aesthetic outcomes of hand work would tend to make us airy, characterless nothings which we sometimes see in the artist-for-art's sake.

The purpose of educative manual training as a factor of liberal education, is neither art alone, which relates to enjoyment, nor mechanical skill alone, which relates to efficiency, but a rational union of the two in a life of conscious self-expansion.

Manual training, in the choice of ways and means, should follow the course of mental development. It should first appeal to the analytical or discriminating processes in observation and discovery; later on to the synthetic process in the application of knowledge gained to productive, inventive and creative activities; and on the moral side it should address itself to the individual and social powers.

The purpose of analysis is synthesis; it means nothing unless it leads to synthesis. A course of study in manual training which would weary the child by confining him to purely analytical work would be incomplete. A manual training which would confine the learner to incomplete synthesis, to the making of parts of things, never giving him the satisfaction of completing the mental process involved in the making of complete wholes of which these technical elements are the parts, would be a failure.

The course of study which has been followed out by the Manual Training Department during the past year has been closely based on Froebel's thoughtful division of the products of the work into (1) forms that bring knowledge which, in the elementary schools tend to become organized into science; (2) forms that represent or aid life which, in the elementary school, tend to forms of utility and to industrial pursuits; and (3) forms that gratify the sense of har-

mony, of the beautiful,—which, in the elementary school lead to true artistic self expression. A very few of the teachers have endeavored to follow the same principles that guide the work in the kindergarten. They have at every point made progress, from analytic to synthetic processes. These considerations have led to the selection of material, the use of tools, and the method of instruction. The principle of continuity and wholeness in every part of the work has pervaded the work of many of the teachers.

In many cities some principle of selection as to what boys should take manual training has been followed—either in the leading boys of ordinary grammar schools, or boys who were guaranteed to stay at school rather longer than the average, or the biggest and strongest, or boys whose abilities had won for them places in more advanced schools, or, to put it briefly, boys who were supposed to have in connection with them some circumstance or other favorable to manual training. The Board of Education of Chicago was entirely at variance with this principle of selection, especially when applied to the selection of what may be called the aristocracy of the boys. They made no selection, but decided that all boys, after having reached a certain point in the ordinary school work, should pass through a course of manual training.

What may be called the democratic idea has influenced everything that has been done by the Chicago Board of Education in the direction of manual training, and when the boys are taken by the hundreds and thousands, and of all sorts, sizes and conditions, it will easily be seen how the material arrangements may be thereby influenced.

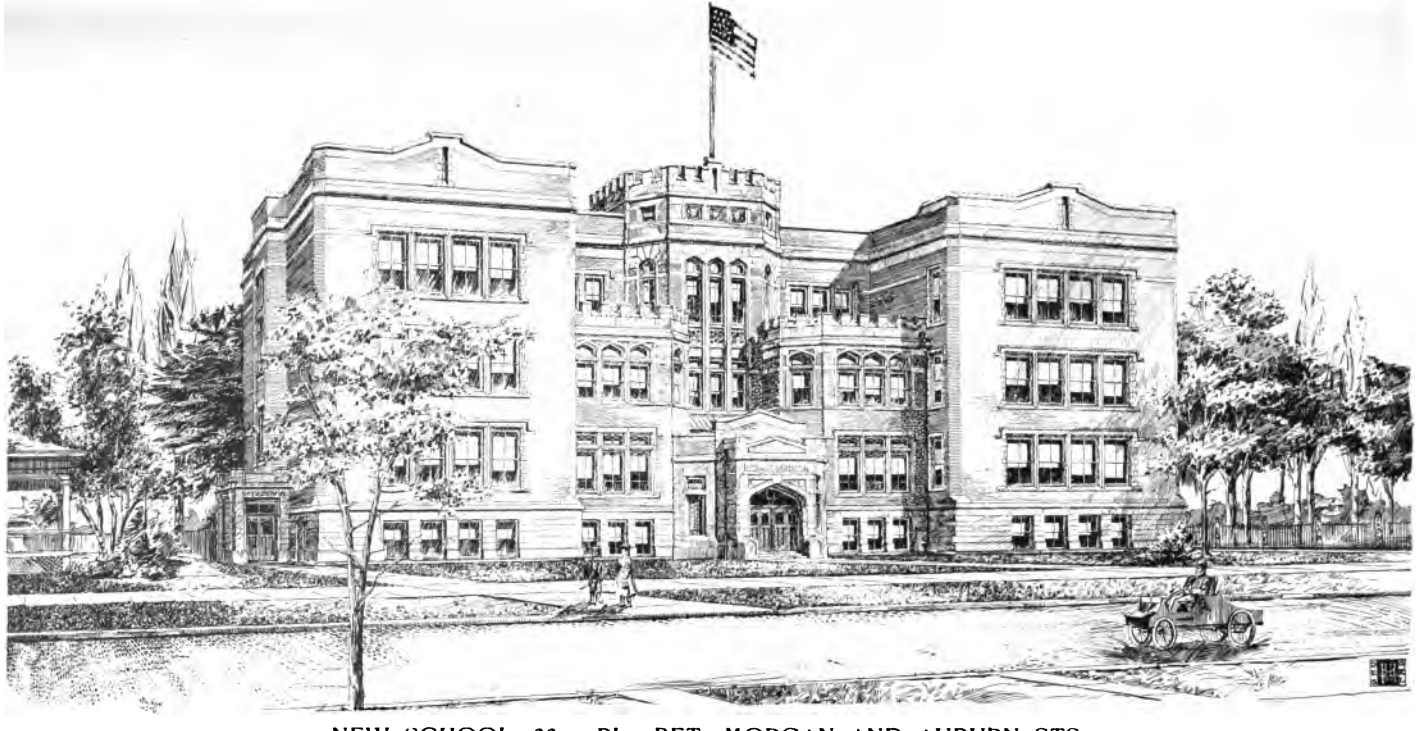
Shortly after assuming the duties of Supervisor, I discovered that all of the centers were very much over-equipped, but not desiring to make any changes which would seem too radical, I did not take any steps in the matter until the month of January. On the 21st of February the Board of Education authorized me to call the surplus equipment in to the supply rooms. With the cooperation of some of the principals who provided the money to purchase the work benches for their schools, this surplus has been used in the equipment of twenty-one new centers at no additional cost to the Board of Education. In the equipment of these new centers care has been taken to provide everything necessary, and of the best quality, but mere luxuries and labor-saving tools have been rigidly eschewed.

The making of the working drawing, which is a concise means of thought expression, has preceded the making of each model. The drawing instead of being taught in the shop would, how-

ever, be taught to greatest advantage in the regular school room by the class teacher, or the drawing teacher who should be supplied by the manual training teacher with models and directions about the drawing. New life would be given to the drawing, for the pupils would be eager to understand and draw the object to be made in the manual training room, a great gain on the blind copying of processes which is now carried on in so many schools. The connection of manual training with the regular school work in this way would lead to a better appreciation of its value by teacher and parents, and to greater interest in the drawing on the part of the pupils.

It is much to be regretted that the ingenious and progressive kindergarten exercises for training pupils in deftness of hand and correctness of eye should be almost entirely discontinued after children leave the kindergarten; and the more so when it is remembered that the mind itself is most effectively trained by such exercises, whenever they are the expression of the child's own thought. It has been impossible this year for the schools to accomplish much in manual training in the lower grades on account of the small appropriation, but I am hopeful that this will be very much increased next year so that it may be possible to introduce construction work into the primary grades of all the schools, besides extending manual training in the upper grades.

The corps of teachers in the manual training department, with few exceptions, where vacancies were created by resignation or otherwise, was the same as that of the previous year. In this connection it is much to be regretted that only two of the teachers of manual training in the schools have undergone a pedagogic training. Experience, if it is worth anything, has abundantly proved that the mechanic as a rule is not the best teacher of his craft educationally, and this is particularly so of the lower grades; a few, who are born teachers, have been eminently successful. The teacher of manual training in a grammar school should, if he is to make the training really serviceable to education, have the same general culture as the teacher of other subjects—no more, no less; if he looks merely to neat-looking work half the value is lost; the model is only a means to an end, and when all is said mere manual dexterity is not the end, which must be mainly intellectual if the expected good is to be gained.



NEW SCHOOL, 33RD PL., BET. MORGAN AND AUBURN STS.

I give below some statistics of the year's work:

Number of teachers at the beginning of the school year	35
Number of teachers at the end of the school year	35
Number of centers at the beginning of the school year	33
Number of centers at the end of the school year	54
Number of first grade pupils enrolled	43
Number of second grade pupils enrolled	106
Number of third grade pupils enrolled	179
Number of fourth grade pupils enrolled	204
Number of fifth grade pupils enrolled	1,091
Number of sixth grade pupils enrolled	2,432
Number of seventh grade pupils enrolled	5,721
Number of eighth grade pupils enrolled	4,126
Total enrollment	13,902
Cost of maintenance, etc., from June 30, 1899, to June 30, 1900.	$42,122.31
Cost of material per pupil for manual training	$ .418

In closing this report I wish to thank you for the great interest you have always taken in this work and for your many helpful suggestions and criticisms which have enabled us to carry on the work successfully.

Very respectfully,

ROBERT M. SMITH,

Supervisor of Manual Training.

REPORT OF THE SUPERVISOR OF DRAWING IN THE HIGH SCHOOLS.

Chicago, January 10, 1901.

Dear Sir: During the past year the Drawing Department of the High Schools has shown a steady growth, as the result of a more earnest attempt and greater pains on the part of the teachers in performing their respective duties in carefully following the program, and in the greater appreciation of the individual needs of the pupil.

The number of teachers employed in this department under its supervisor is 30. Of these 20 are women and 11 are men. We have lost three experienced teachers by resignation, two were away on leave of absence four months, whose places were temporarily filled by substitutes.

With two exceptions, all these teachers are graduates of our high schools and 66 per cent are graduates of a university, a technical school or the art departments of such schools, or they are from Eastern or Western schools of art. The remaining 34 per cent have received their education in Chicago.

The strict economy which we were obliged to exercise during the year has greatly hampered the assistants in their instruction, making it impossible to have a complete equipment for the instruction necessary in this department. This will require an estimated appropriation of $1,500 for the ensuing year. During the past year the total expenditure of $605.64 or 6.05 cents per capita for 10,000 pupils, was entirely inadequate for the proper conduct of the department and, consequently, only 40 per cent of the material actually required could be obtained.

The drawings of our high schools were entered at the competitive educational exhibition arranged by the State Authorities of Education, in connection with the State Fair in Springfield, as in previous years, and the display of this Department was honored with 21 out of 22 awards offered by the State.

Recognition of the department's efficiency was further emphasized in the form of official communications received by the Supervisor, from the Universities of Illinois, Wisconsin, and of Michigan, granting our graduates entering their institutions two and one-half credits and five credits respectively in constructive and in free-hand drawing.

Respectfully submitted,

HERMAN HANSTEIN,

Supervisor of Drawing in the High Schools.

REPORT OF THE DAY SCHOOLS FOR THE DEAF, 1899-1900.

The schools for the deaf already established in eleven different sections of the city were maintained in the same localities during the year 1899 and 1900. The total enrollment of pupils for the year showed an increase in attendance of over 15 per cent., which necessitated a corresponding increase in the teaching force. Miss Emma D. Knox, who taught the previous spring as a substitute, was regularly appointed in September and the Misses Catherine Martin and Margaret V. McKee were also added to the corps of teachers. The following tables will show the increase in enrollment and the actual attendance for the current year.

SCHOOLS FOR THE DEAF—TOTAL ENROLLMENT FOR TWO YEARS, SEPT., 1899, TO JUNE, 1900.

	Combined System Schools.			Oral Schools.			Total No.
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Pupils.
June, 1899.....	35	27	62	60	41	101	163
June, 1900.....	43	18	61	76	51	127	188

Increase, 25 pupils.

Attendance for current year—							
Over 9 months.....	14	4	18	45	31	76	94
Six to 9 months.....	12	5	17	21	15	36	53
Under 6 months.....	17	9	26	10	5	15	41

The per cent of attendance, which for all classes for the year was 91, fell to 88 for the month of June owing to an unusual amount of sickness, but even this is not low when we consider the fact that most of these children are somewhat below par in physical endurance and that over 50 per cent of them must ride long distances on the cars to school.

The earnest co-operation of teachers and pupils in the department was commendable and the results of the year's work, while differing in degree in different classes, was, taken as a whole, reasonably satisfactory.

(Signed) MARY McCOWEN,
Principal Chicago Day Schools for the Deaf.

APPENDIX.

TABLE.

Showing enrollment, membership, attendance and promotions in the several schools, together with the per cent of attendance and the per cent of promotions for the year ending June, 1900:

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.
Chicago Normal	497	403.6	388.6	.....	96	.....
Austin High	399	332.5	318	244	95.7	73.4
Calumet High	315	280.6	265.8	229	94.7	81.6
Englewood High	1,031	918.8	882.2	584	96	63.6
English High & Man'l Training	577	519.4	501.6	411	96.5	80
Hyde Park High	1,472	1,296.2	1,218.7	1,084	94	88.7
Jefferson High	272	240.2	237.3	216	98.8	90
Lake High	323	298	291	226	97.6	75.8
Lake View High	1,001	913.5	874.3	701	95.7	76.7
Marshall High	596	531	505	407	95	76.6
Medill High	533	479.7	460.3	320	95.9	66.7
North Division High	538	488.3	466.1	390	95.5	80
North-West Division High	896	794	755.4	625	95.1	78.7
South Chicago High	341	329.5	312.7	229	94.9	69.5
South Division High	838	755	723.6	456	95.8	60.4
West Division High	1,100	1,013	975	789	96.2	77.9
Adams, John Q	1,354	1,089.7	1,026.7	856	94.2	78.6
Agassiz	1,382	1,195.6	1,127.3	849	95.1	70.9
Alcott	1,207	1,049.1	984.6	907	93.9	86
Andersen	1,708	1,517.1	1,436.7	1,189	94	78.4
Armour Street	1,344	1,143.9	1,083.1	1,026	94.7	89.7
Arnold	1,348	1,110.5	1,046.7	877	94.3	79
Auburn Park	929	732.5	672.6	509	91.8	69.5
Audubon	1,237	1,059.4	988.1	880	93.3	83.1
Austin Grammar	369	325.9	306.7	296	94.1	90.8
Avondale	1,287	1,106.8	1,033.3	878	93.3	78.9
Bancroft	1,168	945	899.9	651	95.2	69
Barnard, Alice L	688	554.9	505.7	501	91.1	90.3
Bass, Perkins	1,673	1,361.1	1,247.4	947	91.7	69.6
Beale	2,241	1,939.4	1,820.9	1,763	93.8	91.1
Beidler, Jacob	860	742.6	690.4	577	93	77.7
Belle Plaine Avenue	623	533.5	500.1	425	93.7	80
Bismarck	1,183	1,032.7	966.8	853	93.6	82.6
Blaine	1,255	1,122.1	1,058.6	818	94.3	72.9
Bowen	168	141.4	134	139	94.7	98.3
Bowmanville	265	219.8	207.6	167	94.4	76
Bradwell, Myra	1,134	924.1	842	736	91.1	80
Brainard	851	691	652.2	637	94.3	92.2
Brenan, Thomas	997	781.1	700.2	659	89.6	84.4
Brentano	1,414	1,269.4	1,232.1	1,067	97.1	84.1
Brighton	1,313	1,069.4	994.4	975	93	91.2
Brown	1,271	1,069.9	1,016	958	95	90
Brownell	737	620	574.7	482	92.6	77.7
Bryant	1,045	911.3	856.6	713	94	78.2
Buckley	377	281.6	249.3	219	88.5	77.8
Burley, Augustus H	1,207	1,059.7	990.8	759	94.4	71.6
Burnside, Ambrose E	757	631.2	586.9	579	93	91.7
Burr	2,191	1,768.3	1,657.4	1,471	93.7	83.2
Burroughs	1,103	853.3	782.7	727	91.7	85.2
Calhoun	1,300	1,112.8	1,040	942	93.4	84.6
Calumet Avenue	713	594.1	554.8	425	93.4	71.5
Cameron, D. R	1,289	1,080.1	1,009.4	821	93	76
Carpenter	1,866	1,658.1	1,564.4	1,414	94.3	85.3
Carter	1,092	895.9	817.3	754	91.2	84.2
Chalmers, Thomas	1,410	1,202.7	1,125.5	1,032	93.6	85.8
Chase	1,220	1,016.9	960.6	712	94.4	70
Chicago Lawn	794	631.7	601.2	546	95.2	86.4
Clarke	1,592	1,301.9	1,241.4	991	95.4	76.1

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.
Clay, Henry	426	330.4	304.9	243	92.3	73.6
Colman	819	645.2	593	554	91.9	85.9
Columbus	955	708	752.6	600	94.3	75.2
Cooper	1,131	979.1	931.8	848	95.2	86.6
Corkery, Daniel J.	478	392.2	366.2	341	92.3	87
Cornell	1,086	933.9	869.9	548	93	58.7
Crerar, John	890	732.2	684.6	567	93	77.4
Cummings	301	243.8	221.7	192	90.9	78.8
Curtis, George Wm.	1,043	911.8	857	762	94	83.6
Darwin, Charles R.	710	620.7	605.8	528	93.6	85.1
Doolittle, Jas. R. Jr	1,465	1,208.4	1,116.5	936	92.4	77.5
Dore	1,063	822.9	752.3	527	91.4	64
Douglas	1,479	1,283.3	1,195.8	1,068	93.2	83.3
Drummond	1,247	1,039.3	963.3	768	92.7	73.9
Earle, Charles Warrington	928	764.9	686.4	500	89.7	65.4
Eighteenth Street	551	427.5	475.3	390	95.5	78.4
Eighty-third Street	685	520	474	394	91.1	75.8
Ellis Avenue	428	361.1	340.5	348	95.5	96.4
Emerson	909	755.7	706.8	701	93.5	92.8
Emmet, Robert	494	418.5	388.9	341	91.7	81.5
Ericsson, John	1,245	1,035.7	966.1	883	93.3	85.2
Everett	1,031	854.9	812.1	662	95	77.4
Fallon	1,100	874.9	796.1	735	91	84
Farragut	1,144	1,078.1	1,024.6	717	95	66.5
Farren	1,097	876.4	805.5	698	91.9	79.6
Fernwood	327	296	269.4	270	94.2	94.4
Field, Eugene	843	698.6	642.2	738	93	105.6
Forrestville	1,508	1,244	1,168.3	952	94	76.5
Foster	2,368	1,965.6	1,781.5	1,439	90.6	73.2
Franklin	1,385	1,197.5	1,126.6	1,145	94.1	95.6
Froebel	1,416	1,198.7	1,147.6	867	95.7	72.3
Fuller, Melville W.	890	771.1	723.1	627	93.7	81.3
Fulton	1,671	1,422.3	1,314	880	91.7	61.4
Gallistel	1,008	774.3	723.4	707	93.4	91.3
Garfield	1,561	1,300.1	1,212.1	956	93.2	73.5
Gladstone	817	750.9	710.2	565	94.6	75.2
Goethe	1,145	1,023.7	974	827	95.1	80.8
Goodrich	1,344	1,163.3	1,072.7	906	92.3	77.9
Goudy, W. C.	879	766.9	718.4	648	93.7	84.5
Graham	1,622	1,332.3	1,224.2	1,095	91.9	82.2
Grant	896	738	698.6	650	94.7	88.1
Greeley, Horace	1,058	929.7	874.6	737	94	79.3
Greene, Nathanael	1,188	1,010.3	930.7	808	92.1	80
Greenwood Avenue	894	766.2	712.8	669	93	87.3
Gresham	648	562.5	521.9	550	93	97.8
Hamilton	978	880.4	833.4	679	94.7	77.1
Hammond	1,005	869.8	817.4	583	93.9	67
Hancock	887	723	671	565	92.8	78.1
Harrison	1,660	1,378	1,288.4	994	93.5	72.1
Hartigan	655	508.2	459	388	91	77.1
Harvard	418	336.9	306.7	248	91	73.6
Haven	1,091	846.4	774.9	670	91.6	79.2
Hawthorne	1,444	1,242.6	1,171.6	806	94.3	65
Hayes	836	687.3	641.6	478	93.4	69.5
Headley	681	608.6	577.7	564	94.9	92.7
Healy	1,477	1,232.6	1,160.5	978	94	79.3
Hedges	689	608.8	565.1	422	92.8	69.3
Hendricks	979	846.6	789.1	734	93.2	86.7
Hoerner	152	113.9	102.8	110	90.3	96.6
Holden	2,082	1,708.1	1,589.6	1,174	93	68.7
Holmes	1,836	1,555.9	1,458.6	1,324	93.7	85.1
Howland, George	1,238	1,018.2	953	828	93.6	81.3
Hoyne, Thomas	863	629.7	582.1	508	92.4	80.7
Huron Street	752	545.6	493.5	439	90.4	80.5
Iowa Street	388	334.9	315	283	94.1	84.5
Irving	899	755.5	706.1	622	93	82.3

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.
Irving Park	1,518	1,273	1,193.8	1,096	93.8	86.1
Jackson, Andrew	1,097	874.5	807.6	640	92.4	73.2
Jefferson	976	754.7	705.8	618	93.5	81.9
Jefferson Park	471	408.4	377.2	347	92.2	85
Jirka, Frank J	1,375	1,104.3	1,038	1,082	94	98
Jones	1,011	694.1	608	429	87.6	61.8
Keith	867	637.7	569.2	444	89	70
Kenwood	573	471.1	436.8	403	92.6	85.5
Kershaw	1,644	1,342	1,255.1	899	93.5	67
King	932	788.4	734.8	647	93.2	82.1
Kinzie	547	349.9	320	288	91.5	82.3
Knickerbocker	1,100	933.5	886	776	94.9	83.1
Komensky	1,008	884.6	845.9	534	95.6	60.4
Kosciusko	713	578.4	536.3	392	92.7	67.8
Kozminski, Charles	905	763.8	715.6	624	93.7	81.7
La Fayette	1,792	1,587.9	1,506.4	1,463	94.9	92.1
Langland	851	738	697	627	94.4	85
La Salle	1,314	1,127.7	1,063.4	845	94.3	74.9
Laurel Avenue	381	343.2	322.2	243	93	70.8
Lawndale	599	495.9	464.6	428	93.7	86.3
Lawson, Victor F	931	805.5	766.1	593	95.1	73.6
Lewis-Champlin	1,269	1,102.9	1,028.8	846	93.3	76.7
Lincoln	1,321	1,131.3	1,067.9	1,064	94.4	94.1
Linne	733	638.5	600.9	510	94.1	80
Logan	1,001	883.5	825.6	694	93.5	78.5
Longfellow	796	708.2	680.2	550	96	77.7
Lowell	1,180	997.1	938.8	831	94.2	83.4
McAllister	1,302	1,012.1	932.2	780	92.1	77.1
McClellan	1,413	1,136.3	1,063.5	955	95.4	84
McCosh	1,166	948.6	869.8	858	91	90.5
McLaren, John	1,210	1,005.7	945	939	94	93.3
McPherson	1,051	914.5	860	748	94	81.8
Madison Avenue	1,048	842.6	776.4	674	92.1	80
Manierre	1,016	876.8	822.5	651	93.8	74.2
Mann, Horace	895	725	679.5	637	93.7	87.8
Marquette	1,506	1,292.5	1,216.4	1,185	94.1	91.7
Marsh, J. L.	382	311.8	285.6	269	91.5	86.3
Marshall	915	794.5	744.1	702	93.8	88.3
Medill	1,065	858.1	813.7	493	94.7	57.4
Mitchell, Ellen	1,862	1,552.3	1,431.5	1,179	92.2	75.9
Montefiore	1,315	1,062.7	968.9	720	91.2	67.7
Moos, Bernhard	697	611.9	578.4	501	94.5	81.9
Morris	1,173	1,065.5	1,013.2	747	95	70.1
Moseley	1,333	1,023.8	936.5	711	91.5	69.4
Motley	1,240	1,070	1,009.4	800	94.3	74.8
Mulligan	1,277	1,109.4	1,041.7	969	93.9	87.3
Nash, Henry H	1,142	970.1	911.5	850	94	87.6
Nettelhorst, Louis	1,212	1,076.6	1,030	984	95.7	88.6
Newberry	1,637	1,411.9	1,333.6	1,051	94.4	74.4
Nixon, Wm. Penn	1,081	918.3	841.6	736	91.6	80.1
Normal Practice	701	565.1	531.2	570	93.9	100.9
Norwood Park	215	184.5	173.4	120	94	65
O'Toole	1,257	1,026	937.1	659	91.3	64.2
Oakland	795	638.4	587.9	481	92.1	75.3
Oak Ridge	669	500.8	463.9	465	92	92.8
Oak Street	881	729.9	694	636	95	87.1
Ogden	1,001	819.2	763.1	706	93	86.2
Ohio Street	364	307.4	286.3	258	93.1	84
Parkman	1,345	1,123.6	1,045.8	962	93.1	85.6
Park Manor	531	446.5	415.4	324	93	72.6
Parkside	713	576.2	534	417	92.6	72.4
Peabody	1,029	872.7	814	471	93.2	54
Pickard	1,513	1,222	1,144.8	1,061	93.7	86.8
Polk Street	1,373	1,066.3	999	742	93.7	70
Prescott	1,146	906.5	835.6	727	92.2	80
Pulaski	1,052	833.8	774.6	660	92.9	79.2

SCHOOLS.	Enrollment.	Average Daily Membership.	Average Daily Attendance.	Promotions.	Per Cent of Attendance.	Per Cent of Promotions.
Pullman	1,564	1,361.6	1,264.9	1,096	92.8	80.7
Raster, Hermann	652	563.3	528.2	393	93.8	70
Ravenswood	1,257	1,108.1	1,043.2	962	94.1	86.8
Ray	1,076	891	835.5	749	93.8	84.1
Raymond	1,131	893	825.5	749	92.4	83.9
Riverdale	189	143.1	134.7	96	94.1	67.1
Rogers	735	612.3	580.8	515	94.9	84.1
Rose Hill	230	186.5	167.8	154	90	82.6
Ryerson	1,184	1,009.9	946.4	769	93.7	76.1
Scammon	1,016	791.2	728	802	92	101.1
Scanlan	935	739.2	684.3	586	92.6	79.3
Schiller	1,249	1,018.6	946.1	655	92.9	64.3
Schley, Winfield Scott	930	862.2	830.3	773	96.3	89.7
Schneider, George	1,228	1,028	948	656	92	63.8
Scott, Walter	944	707.4	690.3	543	91	76.7
Seward	1,148	952.6	893.8	714	93.8	74.9
Sheldon	785	585.3	536.4	505	91.6	86.3
Sheridan, Mark	1,020	852.1	788.9	641	92 6	75.2
Sheridan, Phil	1,339	1,068.3	970.8	733	91	68.6
Sherman	1,571	1,313.1	1,202.7	1,009	91.6	76.8
Sherwood	1,313	1,148.2	1,078.5	1,018	94	88.7
Shields	761	616.1	559	482	90	78.2
Skinner	1,426	1,104	1,023.2	897	92.7	81.2
Smyth, Jno. M	1,424	1,186.7	1,108.6	896	93.4	75.5
Springer	826	685	643.7	591	94	86.3
Spry, John	1,498	1,240.1	1,160.9	673	93.6	54.3
Stony Island Avenue	298	236.5	219.6	196	92.8	82.9
Sumner	1,350	1,149.3	1,077.1	1,013	93.7	88.1
Swing, David	951	832.2	785.3	593	94.4	71.3
Talcott	1,520	1,250	1,180	911	94.4	72.9
Taylor	713	587.9	557.4	482	94.8	82
Tennyson	1,038	853.8	800.6	641	93.8	75.1
Thomas, George H	748	641	598.4	522	93.2	81.4
Thorp, J. N	1,176	928.8	832.8	853	89.6	91.8
Throop	1,015	906.7	857.8	718	94.6	79.2
Tilden	994	761.1	701.1	569	92.1	74.7
Tilton	929	739.7	718.7	595	97.3	80.4
Trumbull, Lyman	849	743	702.7	544	94.5	73.2
Van Vlissingen	1,191	1,001.4	917.4	877	91.6	87.6
Von Humboldt	1,941	1,692.8	1,608.8	1,735	95	102.5
Wabansia Avenue	474	425.9	403.7	329	94.8	77.2
Walsh	1,471	1,278.2	1,203.6	1,017	94.2	79.6
Ward	1.194	970.2	899.8	780	92.7	80.4
Washburne	1,805	1,517	1,372.5	1,121	90.5	73.9
Washington	1,261	1,016.5	950.1	810	93.5	79.7
Webster	928	781.8	729.8	498	93.1	63.7
Wells	1,761	1,541.6	1,457	1,183	94.5	76.7
Wentworth, D. S	1,617	1,377.8	1,267.3	1,089	92	78.5
West Pullman	868	725.8	674.6	535	92.9	73.7
Whittier	1,150	931.4	897.9	875	96.5	93.9
Wicker Park	1,399	1,216.3	1,164.7	1,086	95.7	89.3
Willard, Frances E	907	757.8	705.8	706	93.8	93.2
Woodlawn	1,529	1,274.8	1,177.7	990	92.4	77.7
Worthy, John	647	186.5	186.5	338	100	181.2
Yale	972	814.1	759.1	664	93.2	81.6
Yates, Richard	1,198	1,068.9	1,018.5	929	95.2	86
Schools for the Deaf	188	150.9	138	89	91	60.3
Totals	255,861	213,729.3	199,821.3	170,167	93.5	79.6

The per cent of promotions in the High Schools is lower than formerly because the Average Daily Membership, the basis of the per cent, includes the pupils admitted in February, none of whom were promoted to the tenth grade before the end of June, 1900.

FOSTER DIPLOMAS.

The following pupils were awarded Foster Diplomas at the close of the schools for 1899-1900, as follows:

Adams, John Q., School:
Sigrid H. Hjorth,
Alice V. Johnson,
Edwin J. Larson,
Adelaide McClane,
Jennie E. Nelson,
Mary Ryan.

Agassiz School:
Hattie Kettell,
Sarah Wellner,
Frances Row.

Alcott School:
Elsie D. Knight,
Hannah Bilhorn,
Pearl Madison,
Elizabeth Walsh,
Fred Studley,
Anna Stieglitz,
Atlemon Field.

Andersen School:
George Henry Schroeder,
Adele Marie Hanson,
Ernest Maximillian Orlowsky,
Anna Laurinda Poole,
Anna Louisa Behl,
Mary Svendsen,
Charles Paape.

Armour Street School:
Hugh J. McSweeny,
Josephine M. Schofield,
Katherine M. Grey,
Lucile Woehling,
William S. Jones,
William L. Dwyer.

Arnold School:
Mary P. Puncochar.

Auburn Park School:
Ruby G. Davis,
Iona Tucker.

Audubon School:
Rose Hauck,
Martha Thallman,
Reuben Larson,
Vera Wormwood,
Minnie Stallbohm.

Avondale School:
John A. Kuehn,
Eleanor P. Sweitzer,
Edith Froebe,
Olga Servas.

Bancroft School:
Lydia Carey,
Fred Printz,
Olga Johnson,
Lillie Code,
Clifton Johnson.

Barnard, Alice L., School:
Daisy Knickerbocker,
John McNeil.

Bass, Perkins, School:
Kathleen Burns,
Marie Johannsen,
Rose Brown.

Beale School:
Celia Levine,
Adell Henderson,
Raymond A. Thompson,
Hattie A. Sandberg,
Ruth H. Johnson,
Caroline L. Schlinski.

Beidler, Jacob, School:
Willis H. Pate,
Beda D. Melberg,
Bessie Bennet.

Belle Plaine Avenue School:
Augusta E. Thalmann.

Bismarck School:
Anna M. Diedricks,
Lydia Herklotz,
Frank Tibbetts.

Blaine School:
Arthur Lemke,
Adelaide Schaeppi,
Rose A. Bernard,
Hildur A. Sternlof.

Bowen School:
Mae E. A. O'Malley,
Mary Gertrude Curran.

Bowmanville School:
Josephine L. Goelz.

Bradwell, Myra, School:
Edith Gelin,
Lester Pierce Chase,
Benjamin Pierce Mitchel.

Brainard School:
Sadie May Epstein,
Elizabeth Antoinette Straley.

Brenan, Thomas, School:
Elizabeth Szeszycki.

Brentano School:
Walter A. Lundquist,
May S. Walters,
Fred W. Beecher,
John F. Tracy,
Edwin D. Davis.

Brighton School:
Margaret N. Noble,
Annie Kimley.

Brown School:
Ida Bailey,
John Felmlee,
Carl Reid,
Grace Griffen,
Carrie Schmidt.

Brownell School:
Lydia A. Fildes,
Laura T. Osman,
Imogene S. Pruett,
Theo. Alexander.

Bryant School:
Hazel Genevieve Welsh.

Burnside, Ambrose E., School:
Isabella Kelley,
Edith G. Whitney.

Burr School:
Annie Schneider,
Lydia Lange,
Dora Shermer,
Isabella Klemm,
Etta Schmalz,
Olga Dahlberg,
Emma Fanter.

Burroughs School:
Elizabeth A. Behrens,
Florence M. O'Donnell.

Burley, Augustus H., School:
Lillie F. Silverman,
Minnie T. Lehr.

Calhoun School:
Mercedes Kilner,
James Murray,
Mabel Reed,
Ruth Carter,
Elsie Read,
Patrick Quinn,
Ada Hughes.

Calumet Avenue School:
Ernest Hartung,
Ferdinand R. Ellemund.

Cameron, D. R., School:
Josephine Marie Cross,
Florence Adelaide Welter.

Carpenter School:
Carolina Amanda Bjertnes,
Eleanor W. Hecht,
William J. Larson,
Fred Martensen,
Oscar W. Olson,
Carrie E. Anderson,
Tyra E. Anderson,
Rose Simon.

Carter School:
Joseph Bonanomi,
Edith Cella,
Frank Born.

Chalmers, Thomas, School:
Blanche Josephine Williams,
Bessie C. Keating,
Robert J. Kerner,
Edna Grace Goudy,
Victoria May Crawley,
Charlotte M. Ernst.

Chase School:
Anna McAuliffe,
Ambrosia Cox,
Ida Hartzman.

Chicago Lawn School:
Frances Louise Julius,
Clarence Watson Twichell.

Clarke School:
Carrie N. Anderson,
Cora Verberg,
Cora E. Fredrickson,
Ethel A. Wood.

Clay, Henry, School:
Nellie Kight.

Colman School:
Theresa P. O'Neil,
Flora M. Klink.

Cooper School:
Anna Albie Nevola,
Bretislav Zeman,
Lillian A. Halas.

Corkery, Daniel J., School:
Edward A. Slack, Jr.,
Edna L, Phillips.

Cornell School:
Bertha A. Decker,
Mabel Howland,
Adaline E. Bouton,
Jennie M. Ryan.

Crerar, John, School:
Max Fenneman,
Caroline C. Hogan.

Cummings School:
Samuel Job Aurelius.

Curtis, Geo. Wm., School:
Bessie Overtoom,
Helen Hard,
Lillie Locho.

Darwin, Charles R., School:
Stella Larrien,
Lydia Larson.

Doolittle, James R., Jr., School:
Eleanor L. Hall,
Julia A. Heede,
Frances M. Whitley,
Enid D. Bassett.

Dore School:
John Callahan,
Rocco Crapple.

Douglas School:
Julius E. Lackner,
Ernest Levy,
Anna Shattuck,
Jean L. Forsyth,
Irene Goldsmith,
Ivan J. Reitler,
John P. Ahrens, Jr.

Earle, Charles Warrington, School:
Sophia M. Dahlke.

Emerson School:
William S. Graham,
Mary Quinn,
Hazel Irene Nohren.

Ericsson, John, School:
Alice Friend,
Stuart Bliss,
Florence Broxham,
Frances Hoyt.

Everett School:
Mary Dunleavy,
Harold Olsen.

Fallon School:
Mary L. McClory,
Elizabeth R. Redding.

Farragut School:
Bohumil Kral,
Joseph Cerney.

Farren School:
Azile M. Milord,
Josephine E. De Moss,
Veronica V. Ferguson,
Elizabeth C. H. Wilke.

Fernwood School:
Lena Freda Eberhardt,
Anna Bruining.

Field, Eugene, School:
Robert C. Christophel,
Luella C. D. Wright,
Amy Gagel,
Florence Lahman.

Forrestville School:
Mord A. Peck,
Lester Julian Felsenthal,
Florence Hannah Kiper,
Eleanor Josephine Proctor,
Hannah Rose Nathan,
Bessie Beatrice Iralson,
Dorothy Loeb.

Franklin School:
Esther Norman,
Zdislaw Hager,
Sigrid Fellgren,
Elsie Becker,
Gertrude Williams,
Anna Thelin,
Olga Sigel,
Julia Podafka,
Hedwig E. Knorr,
Malcolm Magnusson,
Belle Phillips,
Harry Spoeri.

Froebel School:
Anna C. Mueggenborg,
Louisa M. Suess,
Clara Haack,
Joseph Kroupa,
Hildur Westlund.

Fuller, Melville W., School:
Anna Belle Whittin,
Katharine L. Calloway,
Edward G. Felsenthal,
Roe L. Stevens.

Fulton School:
William F. Weiher.

Gallistel School:
Howard G. Wilson.

Garfield School:
Alma E. A. Foerster,
Mamie Y. Aaron,
Anna G. Levin,
Hattie A. L. Kretchmer.

Gladstone School:
Edward Skupa,
Anna Berland,
Cora Hotchkiss,
Hilda Stenge,
Hattie Eckart.

Goethe School:
Clara F. Kolkow,
Othelia Krueger,
Erna Ackerman.

Goodrich School:
Ida Miller,
Rosa Rabinovich,
Rose Sefcik,
Lizzie Levine.

Goudy, W. C., School:
Margaret I. Glock,
Nellie Mary Wayman,
Blanche E. Thorsen.

Graham School:
Earl F. Ruther,
Doda J. Furlong,
Kathleen L. Grady,
Carrie M. Buff,
Pearl F. Armstrong,
Anthony J. O'Malley.

Grant School:
M. Alice Florinteena Bouvia,
Edna M. Sturm,
Helen Louise Wood.

Greeley, Horace, School:
Catharine L. Cramer,
Margaret Ryan,
Ella Almeroth,
Edith Anderson.

Greene, Nathanael, School:
William J. McKay,
Elmer C. Brown.

Greenwood Avenue School:
Edna Rittenhouse,
Haven Blain Cobb,
Lottie Hill,
Grace Jackson Hills,
Margaret Louise Jennings.

Gresham School:
Ethel L. Dillon,
Orrisa Lothrop.

Hamilton School:
Jean L. Lukens,
Minnie Klamm,
Rose A. Childrose.

Hancock School:
Walter Buckberg,
Albert A. Wagner.

Harrison School:
Alma Schimmel,
Frank D. Salmond,
Ella Kuhn,
Olga W. Anderson.

Harvard School:
Loretta Marks,
Mabel Marston.

Haven School.
Frieda R. Stroh,
Ada V. Jones,
Melanie Bonshelle.

Hawthorne School:
Theodore Eugene Wirths,
Nellie Elizabeth Kleen,
Erich Elmer Pacyna.

Hayes School:
Addison J. Trunkey,
William Maish.

Headley School:
Leola M. Parker,
Elise Eugenia Roessler,
Clarissa W. Hertsch,
Charlie W. Jacob,
Mary Agnes Townsend,
Pearl Florence Hubacher,
Myrtle May McKenna.

Healy School:
Edward A. Gibbons,
Emma L. Treiber,
Lydia Ehlers.

Hendricks School:
Paul A. Buhlig,
Charles W. Griesser,
Annette B. Wangnett,
Louise Wagner.

Holden School:
Ella G. Dempsey,
Harry P. Heatter.

Howland, George, School:
Louis B. Dodd,
Frances L. Clinton,
Isabel Bassett.

Holmes School:
Gustave Engstrom,
Thompson White,
Flora Wildauer,
Freederike Claussen,
Eleanor Leeb.

Hoyne, Thomas, School:
Mollie Liphsitz,
Clara Mary Henning,
Florence Davis,
Archie B. Raymond,
Augusta Huebsch.

Irving School:
Nellie Talkington,
Tot M. Patterson,
Robert C. Baer.

Irving Park School:
Mabel M. McConoughey,
Callie E. Parish,
Lily Hansen,
Ethelreada Dunlop.

Jefferson School:
Alice Camilla Kehoe,
Arthur B. Krock,
Joseph Henry Bos.

Jefferson Park School:
Alvina Constance Teague,
May E. Cameron.

Jones School:
Clara L. Gurney,
Henry Castor.

Keith School:
James Washington.

Kenwood School:
Faith Holmes,
Katharine Schulte,
Alice Neeld.

Kershaw School:
Maude Lillian Place,
Maud Meeker Guild.

King School:
Lois M. Winship,
Ada S. Reid,
Eleanor J. Thomson.

Knickerbocker School:
Lola Martin,
Rosa Froehde,
Merlin Alford,
Florence Blakesley,
Viola Brandt.

Kozminski, Charles, School:
Leo Edelstein,
Mary P. Bowen,
Inez Yager.

La Fayette School:
Stella Wennberg,
Martha Koschnick,
Sigurd Enger,
August Gierke,
Esther Kindig,
Alma Partensky.

Langland School:
Alice A. Smith,
George Fross.

La Salle School:
Mabel Bogardus,
Helen Quinlan,
Addie A. Spohn,
Arthur Lang,
Lily A. Schick.

Lawndale School:
George A. Mattmiller,
Ruby Tennant.

Lawson, Victor F., School:
Laura H. Gerlach.

Lewis-Champlin School:
John L. Finnegan,
Orlo Montague,
Mabel E. Cumley,
Florence M. Oxnam,
Zillah G. Dodds.

Lincoln School:
Emily R. Stearns,
Martha E. Grunewald,
Louise Holingue,
Florence Schuster,
Earl F. Jager,
Irma C. Kirschhoefer.

Linne School:
Agnes Anderson,
Laura Christensen.

Logan School:
Hattie Linda Knudson,
Julius Slora,
Ralph Odegaard.

Lowell School:
James T. Groot,
Henry Reckendorf,
Grace Holland.

McAllister School:
John G. Huissel,
Rose E. Maier.

McClellan School:
Frank I. Hooper,
Joseph H. Cassells,
James J. Zaruba,
Ellen G. Carney.

McCosh, James, School:
William C. Bates,
Eugene Van Cleef,
Ella Henry,
Grace I. Stevens.

McLaren, John, School:
Florence G. Sloan,
Marie Adele Ludington,
Lilian A. Meyers,
Clara Kraus,
Sara B. Chambers,
Essie B. Stiller.

McPherson School.
Agnes Robertson,
Florence Anna Miller,
Leah Frances Cox,
Louella S. Patterson,
Marguerite Chapin.

Madison Avenue School:
Anna Louise Schick,
Marguerite E. Dolan,
Joseph A. Whittam.

Mann, Horace, School:
Gertrude A. Sehlbach,
Mary B. Lutz,
Camilla H. C. Nielsen.

Marquette School:
Freda Wernle,
Otillie Benesch,
Rena Parker,
Myrtle Mosher,
Willie Soelke,
Arthur Eller,
Fannie Hirsch,
Stella Sonnenschein,
Valdena Johler,
Alice Carr.

Marsh, J. L., School:
Cecilia A. Hansen.

Marshall School:
Sara Burns,
Ida Phillips,
Reva Jackman,
Earl Shover,
Nita Mullette,
Erma Snediker.

Medill School:
Mary Scheinman,
William J. Womer,
Margaret M. J. Kelly.

Mitchell, Ellen, School:
Margaret L. Borchardt,
Catherine G. Sullivan,
Dorothy C. McInnis,
Anna J. E. Jones,
Frederick Schaefer,
Maude G. McKeon,
Mae Clewell,
Hattie M. Butterfield,
Ethel May Gear,
Matilda Schacht.

Montefiore School:
Edward Wm. Foley.

Morris School:
Elsa M. Penner,
Gertrude Webb,
Helga R. Ahlberg,
Alice D. Anderson.

Moseley School:
Lucile Meredith,
Anna G. Casperson,
George E. Dawson.

Nash, Henry H., School:
Olive May Rhodes,
Mary Kate Smith,
Margaret N. Benson,
Alice Elma Arndt.

Nettelhorst, Louis, School:
Edith Anderson,
Harold V. Amberg,
Charles Brand,
Gertrude Becker,
Lena Kreppel,
Josephine Hoch.

Newberry School:
Frederick P. Duerr,
Harriet M. Hubeny.

Nixon, Wm. Penn, School:
Ruby E. Schumacher,
James J. Blake,
Hedwig Schiess,
Beulah P. Smith.

Norwood Park School:
Laura A. Stevers.

Oakland School:
Hazel Adelia Smith,
Fred Le Moyne Burkholder.

Oak Ridge School:
Lillian D. Bargquist,
Gordon T. Courtenay,
Clara Nourse.

Ogden School:
Paula Wernicke,
Lydia Louise Deufel,
Edith Mary Frawley,
Neoma King,
Helen Wisler,
Eva Smith.

Parkman School:
Clara E. M. Sandberg,
Maude E. Vermette.

Park Manor School:
Lillian Nelson,
Harry Woodworth.

Parkside School:
Alma Forsell.

Pickard School:
William J. Hopp,
Mary Pospisil,
Esther Anderson.

Prescott School:
Edward W. Boehm,
Mary F. Stein,
Alma Colson.

Pullman School:
Margaret Mary McGuane,
May Deal.

Raster, Hermann, School:
Bertha L. G. Hosmer.

Ravenswood School:
Elsie Kleeman,
Lillian A. Berlin,
Amanda Holm,
Peter Watson,
Clarence Weber.

Ray School:
Willie Phoenix,
Gladys Cleverdon,
Josephine A. Wiener,
Willie Webbe,
Harry Armstrong,
Weir McCracken,
Edna Stevons,
Edith Sandberg.

Raymond School:
Leo Mayer,
Adele H. Levi,
Katherine Seelige,
Clarence L. Mannheimer.

Riverdale School:
Augusta Werner.

Rose Hill School:
Sadie I. Clybourne.

Ryerson School:
Alice J. Case,
Eva I. Nelson,
Anna Holgerson.

Scammon School:
Louis H. Spohn,
Tillie Braun,
Mamie G. Aylesworth,
Lottie C. Parr.

Scanlan School:
Carol Nelson.

Schiller School:
Emma I. Kaehler,
Elenore M. Graf.

Scott, Walter, School:
Beatrice Short,
Myrtle White,
Adelaide Barsaloux,
Alice Greenhaulgh.

Seward School:
Clara M. Dunn,
Anna M. Simpson.

Sheridan, Mark, School:
William Stephenson,
Bernard Barnard.

Sheridan, Phil, School:
Gertrude Hess,
Lillian Bethel.

Sherman School:
Maud Lanning,
Norine E. Stewart.

Sherwood School:
Alice M. Pero,
Mabel E. Olson,
William H. Trowe,
Mabel C. Ketchum.

Shields School:
Edward Ketterer.

Skinner School:
Emma Marie White,
Cecilia L. Harris,
Mary M. Thomas,
May M. Halley,
Annie M. Dillon.

Smyth, John M., School:
Anna S. Friedman,
Ida Shapiro,
Louis I. Perlman,
Mary L. Friedman,
Irene M. Flanagan,
Wilbur T. Meyer.

Springer School:
Norman T. Ohlander,
Mabel Coey,
Mabel Herrick.

Stony Island Avenue School:
Bethel Brown.

Spry, John, School:
Bertha Baumrucher,
Antonia Knakal,
William Lindelsee.

Sumner School:
Laura V. Solomon,
Olive A. Haugen,
Arvilla I. Robertson,
Clara Hanke,
Michael J. Morrison,
Olive S. McCullam.

Swing, David, School:
Anton J. Pluckebaum,
Rose T. Fuker.

Taylor School:
Fred Robinson,
Lillian P. Lind.

Tennyson School:
Joseph Rosenblum,
Annie E. Johnson,
William L. Bond.

Thomas, Geo. H., School:
Swen Adolph Sundlof.

Thorp, J. N., School:
Michael McCaughey,
Frank Beaner.

Throop School:
Anna Adamovic,
Helen M. Turek,
Joseph J. Klaus.

Tilden School:
Ethel I. Wilmot.

Tilton School:
Louise Marie Clausen,
Burr Willard,
Albert James Foute.

Van Vlissingen School:
Maggie Vanden Berg,
Ruth A. Swanson,
Mamie Geschwind.

Von Humboldt School:
John Engblom,
Maude Johnson,
Pearl Kruger,
Caroline Bonneson,
Helen Schnieder,
Mabel Johnson,
Holder Carlson,
Arthur Paarman,
Minnie Johnson,
Olive Hansen,
Irene Ryan,
Lillie Peterson.

Walsh School:
Elizabeth Zwonar,
Hattie A. Hoff,
Anna Hospes,
Catharine M. Heese.

Ward School:
Jennie Louise Johnson.

Washington School:
Rose Klein,
Jennie F. Peterson,
Margaret H. Olson.

Webster School:
Emma Gustafson.

Wells School:
Alexander R. Webb,
Joseph Supkowski,
Otto Beyer,
Betty A. Koepke,
Rosella Niegel,
Laura S. Giesecke,
Jennie Ksander.

Wentworth, D. S., School:
Sadie C. Anderson,
Louise M. Schade.

West Pullman School:
Bertha Hansen,
Crystal Paulsen.

Wicker Park School:
Jessie S. Peterson,
Helen A. M. Consoer,
Ella Uihlein,
Lena Howitt,
Florence S. Blegen,
Robert E. Jorgensen,
Grace L. Dayment,
Ellen M. Young.

Willard, Frances E., School:
Robert H. May,
Jennie W. Lynn,
George B. Samter,
Ray A. Wittl,
Harry S. Frankenstein,
Theora Smith.

Woodlawn School:
Winifred Davis,
Louise Patterson,
Tobine Kellner,
Catherine Jeffrey,
Jean Wallace.

Yale School:
Lilian Gielen,
Joseph Nangle,
Jessie Dillon,
Raymond M. Smith,
Elizabeth R. Vanderpoel,
Ethel M. Miller.

Yates, Richard, School:
Haven Marsh,
Amelia Henrietta Blix,
Florence Ethel Laxton,
Arthur Ioas,
Elmira W. Kendell,
Hattie Taraldsen,
Charles Ruzek.

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS.

SCHOOLS.	LOCATION.	When Erected.	No. of Sittings.	Size of Lot.	Value of Lot.	Value of Furniture and improvements.	Total Value.
English High and Man. Train'g	Nos. 126-128 S. Jefferson st.	.....	.....	.....	Rented.	$ 31,200	$ 31,200
Austin High	Frink st., bet. Walnut and Willow avs.	1889 / 1897	588	327 x 475.34	$ 34,750	61,400	96,150
Englewood High	Stewart av. to Princeton av., bet. Englewood av. and W. 61st pl.	1887	742	244.8 x 589	43,200	86,750	195,895
Englewood High Addition	.....	1898	292	.....	.....	65,945	
Hyde Park High	Kimbark av., w. f., bet. 56th and 57th sts.	1894	940	250.8¾ x 175.8	25,000	141,800	166,800
Jefferson High	W. Wilson av., from N. 46th av. to N. 47th av.	1883	102	270 x 250	8,000	26,790	34,790
Lake High	S. E. cor. Union av. and W. 47th pl.	1886	417	217.3 x 125	13,020	62,870	75,890
Lake View High	N. E. cor. Irving Park blvd. and N. Ashland av.	1886 / 1898	815	392 x 160.35	29,140	201,120	230,260
North Division High	N. E. cor. Wells and Wendell sts.	1883	672	220.55 x 108.95	36,460	70,660	107,120
Northwest Division High	N. E. cor. N. Claremont and Potomac avs.	1892	1,119	269 x 124	16,110	161,950	178,060
South Division High	S. W. cor. 26th st. and Wabash av.	1884	867	181.25 x 157.08	54,980	94,705	149,685
West Division High	S. W. cor. W. Congress and Honore sts.	1885	1,240	Irregular	51,250	164,820	216,070
Adams	Townsend st., w. f., bet. Chicago av. and Locust st.	1896	1,180	265 x 125.31	70,000	90,675	160,675
Agassiz	S. W. cor. Diversey and Seminary avs.	1877	770	400 x 120	38,185	24,285	98,870
Agassiz Addition	.....	1888	482	.....	.....	36,400	
Alcott	N. E. cor. Wrightwood av. and Orchard st.	1883 / 1898	1,253	250 x 150	45,000	87,160	132,160
Amerson (closed)	N. E. cor. Austin and N. 50th avs.	1882	Closed	175 x 120	4,200	4,650	9,400
Amerson Annex (Closed)	.....	.....	Closed	.....	.....	550	
Andersen	S. E. cor. N. Lincoln and W. Division sts.	1885	810	315.5 x 109.8	31,500	55,700	145,730
Andersen Addition	.....	1893	726	124.4		58,530	
Andersenville Br. W. C. Goudy.	Foster av., from N. Ashland av. to Clark st.	1888	237	333 x 117.48	11,300	10,500	21,800
Armour Street	S. E. cor. Armour st. and Bickerdike square	1879 / 1893	1,206	170 x 150	17,000	82,410	99,410
Arnold	N. E. cor. Burling and Center sts.	1884 / 1898	1,128	198 x 124	28,115	94,510	122,625
Auburn Park	Butler st., w. f., bet. 80th and 81st sts.	1891	451	126 x 265.6	5,000	34,470	39,470
Audubon	Cornelia st., from N. Hamilton av. to N. Hoyne av.	1894	1,212	264 x 175	8,340	73,935	82,275
Avondale	S. E. cor. N. Sawyer av. and W. Wellington st.	1895	570	397.25 x 123.25	10,300	43,155	53 455
Avondale Branch	S. E. cor. Diversey and Milwaukee avs.	1880	238	Triangle 291.8x 228.8 x 188.2	7,810	11,000	18,810
Bancroft	N. Maplewood av., e.f., bet. Wabansia and W. North avs	1892	1,054	223 x 125	8,600	82,690	91,290
Barnard, Alice L.	W. 104th st., from Charles to Church sts.	1893	810	397 x 202.9	6,300	72,750	79,050
Bass Perkins	N. W. cor. S. May and W. 66th sts.	1895	1,126	196.82 x 124.57	4,900	77,895	82,795
Beale	N. E. cor. S. Sangamon and W. 61st sts.	1892 / 1898	1,634	299.5 x 125	11,400	131,350	142,750
Beaubien Br. of D. R. Cameron,	N. W. cor. N. 41st ct. and Hirsch st.	1894	216	192 x 125.75	6,575	9,225	15,800
Beidler, Jacob	S. E. cor. Walnut st. and Kedzie av.	1881	810	209.1 x 150	17,000	49,750	66,750
Belle Plaine Avenue	S. W. cor. N. Leavitt st. and Belle Plaine av.	1893	291	225 x 124.16	6,750	12,850	19,600

Bismarck	N. W. cor. N. Central Park and Armitage av.	1896	1,098	266.5	x 133.35 / 149.05	16,800	80,810	97,610
Blaine	N. E. cor. Grace and Janssen sts	1893	1,203	250	x 166.35 / 125.1	13,500	78,930	92,430
Bowen	N. E. cor. Houston av. and 93rd st	1876 / 1888	626	171.3	x 140	16,370	76,755	93,125
Bowmanville	W. Foster av., w. of and near Lincoln av	1874	284	120	x 354.85	3.500	11,900	15,400
Bradwell, Myra	S. W. cor. Sherman av. and 77th st	1889 / 1895	954	298.5	x 167	11,335	68,480	79,815
Brainard	Washburn av., bet S. Leavitt st. and S. Hoyne av.	1885	810	175	x 124	8,750	52,560	61,310
Brainerd Br. of Gresham	S. Ada st., bet. W. 88th and W. 89th sts	1889	192	150	x 126	3,000	16,990	19,990
Brenan, Thomas	Lime st., bet. Archer av. and 27th st	1884	837	275	x 109	13,750	58,400	72,150
Brentano	N. Fairfield av., bet. Schubert and W. Diversey avs.	1893	1,171	250	x 125.8	9,230	82,200	91,430
Brighton	35th st., from S. Winchester av. to S. Lincoln st.	1890	694	267	x 134	13 190	36.800	92,160
Brighton Addition		1886	437				42,170	
Brown	Warren av., from S. Hermitage av. to S. Wood st	1857	468	266	x 122.1	34,870	44,750	127,520
Brown Addition		1870	639				47,900	
Brownell	Perry av., bet. W. 65th and W. 66th sts	1888	618	174	x 184.1	15,800	49,300	65,100
Bryant	S. 41st ct., bet. W. 13th and W. 14th sts	1894 / 1898	958	275	x 125.6	9,650	79,530	89,180
Buckley	N. E. cor. S. Hermitage av. and W. 43rd st	1879	389	226.75	x 126	8,550	20,700	29,250
Burley, Augustus H	Noble st., bet. N. Ashland av. and N. Paulina st	1896	1,208	254.1	x 133	12,300	91,350	103,650
Burnside, Ambrose E	N. W. cor. 91st pl. and Langley av.	1898	570	235	x 125.25	6,875	58,620	65,495
Burnside Branch	S. W. cor. Burnside and Champlain avs.	1889	179	150	x 150.8 / 60.5	1,600	3,100	4,700
Burr	Wabansia av., from N. Ashland av. to N. Marshfield av.	1873	509	267.3	x 296.2	22,075	37,500	
Burr Addition		1885	672				43,500	185,215
Burr Addition		1897	775				82,140	
Burroughs	S. W. cor. S. Washtenaw av. and W. 35th pl.	1893	792	216.35	x 125	6,700	77,700	84,400
Calhoun	N. E. cor. Jackson blvd. and S. Francisco st.	1881 / 1897	1,316	250	x 121	29,500	110,400	139,900
Calumet Avenue	Calumet av., bet. 26th and 27th sts	1871	658	146	x 177.75 / 181.75	29,200		29,200
Cameron, D. R	S. W. cor. Monticello and Potomac avs.	1897	871	200	x 125 / 158	3,695	75,040	78,735
Carpenter	S. W. cor. W. Huron st. and N. Center av.	1868 / 1891	1,567	213	x 205	30,750	123,600	154,350
Carter	N. E. cor. Wabash av. and 61st st.	1885	374	198	x 170	22,000	34,350	109,440
Carter Addition		1894	548				53.090	
Chalmers, Thomas	S. W. cor. S. Fairfield av. and W. 12th st.	1886	1,072	263.5	x 152	15,425	69,285	84,710
Champlin	On Englewood High School lot	1892	700				72,395	72,395
Chase	N. E. cor. Point st. and Cornelia ct.	1894	1,062	264	x 200	13.125	73,485	86.610
Chicago Lawn	N. W. cor. 62d pl. and Hamlin av.	1894	212	203.5	x 124.8	4.500	9 475	13,975
Chicago Lawn, Branch 1	S. Homan av., from W. 65th st. to W. 65th pl.	1880	166	264.24	x 297.9	12,000	5 825	17,825
Clarke	S. Ashland av., from W. 13th st. to Hastings av.	1868 / 1893	1,488	264.3	x 144	37,850	139,510	177,360
Clay, Henry	113th st , from Superior av. to Buffalo av.	1887	389	264.77	x 185.62	17.500	21,150	38,650
Colman	Dearborn st., bet. W. 46th and W. 47th sts.	1887	895	200	x 100	10,000	56.500	66,500
Columbus	Augusta st., bet. N. Leavitt st. and N. Hoyne av.	1886	838	216	x 124.83	15,800	57,900	73,700
Cooper	W. 19th st., bet. S Ashland av. and S. Paulina st.	1885	895	175	x 125	11.550	55,740	67,290
Corkery, Daniel J	W. 25th st., from S. 43rd av. to S. 43rd ct.	1875	372	362.25	x 125	7,200	28 350	35,550
Cornell	Drexel av., bet. 75th and 76th sts	1873 / 1896	1,032	253.25	x 125	8,260	84,345	92,605
Crerar, John	Campbell av., from W. Taylor st. to Fillmore st.	1892	845	268.6	x 125	25,520	78,400	103,920

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—Continued.

SCHOOLS.	LOCATION.	When Erected.	No. of Sittings.	Size of Lot.	Value of Lot.	Value of Furniture and improvements.	Total Value.
Cummings	Calhoun av., bet. 107th and 108th sts.	1883	357	200 x 125	$ 2,800	$ 23,360	$ 26,160
Curtis, George William	S. E. cor. 114th pl. and State st.	1893	1,012	268 x 124.49	8,835	79,475	88,310
Darwin, Charles R.	N. W. cor. Edgewood av. and Catalpa pl	.....	.....	204 x 140.5	15,000	.....	15,000
Deaf Mute	Monroe st. (School Fund property)	1860	90	.....	.....	850	850
Dewey, George	S. E. cor. 54th st. and Union av.	.....	.....	132.30 x 201	13,500	.....	13 500
Doolittle, Jas. R., Jr.	35th st., bet. Rhodes and Vincennes av.	1881	800	220 x 231	55,000	48.250	150,080
Doolittle, Jas. R., Jr., Addition	.....	1885	517	.....	.....	46.830	
Dore	Harrison st., near S. Halsted st.	1867 / 1893	893	250 x 111	100,000	48.620	148.620
Douglas	S. E. cor. 32nd st. and Forest av.	1889	1 304	300 x 125.45	60,000	99,940	159.940
Drexel Br. of Hermann Raster	S. Oakley av., bet. W. 64th and W. 65th sts.	1881	108	122 x 126	2,500	4,350	6,850
Drummond	S. W. cor. Girard st. and Clybourn pl.	1893	1,683	240.3 x 125	5,700	79,850	85,550
Dummy Jct. Br. A. L. Barnard	S. Aberdeen st., bet. W. 98th and W. 99th sts.	.....	36	150 x 156.75 s.s. 134 n.s.	1,000	2,250	3,250
Dunning Br. Irving Park	S. E. cor. W. Addison st. and N. 64th av.	1895	141	132 x 124.9	1,400	7,650	9,050
Earle, Charles Warrington	S. E. cor. W. 61st and S. Hermitage av.	1896	580	225 x 124.33	5,000	46,010	51.010
Edgebrook Br. Jefferson Park.	S. W. cor. Carpenter and Ormonde avs.	1898	36	236.8 x irregular	1,000	9.385	10,385
Edgewater Br. of W. C. Goudy.	Winthrop av., 300 feet north of Ardmore av.	1898	108	250 x 150	15.000	9.595	24,595
Eighty-third Street	83rd st., from Houston av. to Coles av.	1869	44	265.52 x 148	7,950	1,350	21,180
Eighty-third Street Addition	.....	1893	272	.....	.....	11.850	
Ellis Avenue	N. E. cor. Ellis av. and 72nd st.	1893	238	161.7 x 125	8,340	14.290	22.630
Elsdon Br. of Chicago Lawn	Archer av., west of and near S. 40th av.	.....	132	One acre.	2.000	4,150	6,150
Elston Road Br. of Linne	S. E. cor. Elston av. and N. Troy st.	1885	54	Irregular.	3.500	1,700	5,200
Emerald Av. Br. Auburn Park.	Emerald av., bet. W. 79th and W. 80th sts.	1889	277	150 x 144.4	6,000	19.500	25,500
Emerson	N. W. cor. Walnut and Paulina sts.	1884	810	157 x 119.4	14.900	53.850	68,840
Emmet, Robert	N. W. cor. Madison st. and Pine av.	1893	390	200 x 140	12.000	20.500	32,500
Ericsson, John	W. Harrison, bet. S. Sacramento and S. Francisco avs.	1883	1,215	225 x 154	17.640	74.050	91,690
Everett	S. E. cor. S. Irving av. and W. 34th st.	1892	1,056	288 x 125	7,500	83,615	91,115
Fallon	N. W. cor. Wallace and W. 42nd sts.	1880 / 1898	1,176	200 x 124	8.000	84,515	92,515
Farragut	S. Spaulding av., bet. W. 23rd and W. 24th sts.	1894	1,236	300 x 125	7,500	78 595	86,095
Farren	Wabash av., bet. 50th and 51st sts.	1882 / 1899	1,110	199⅔ x 160.3	7,200	113,185	120,385
Fernwood	N. E. cor. Wallace and 104th sts.	1885	172	117 x 132	2.000	4,700	6,700
Field, Eugene	S. E. cor. Ashland and Greenleaf avs.	.....	720	221.65 x 175.3	8 315	68.340	76,655
Field, Eugene, Br.	N. E. cor. Lunt av. and Robey st.	.....	200	200.4 x 172	7,980	7,300	15,280
Fifty-fifth St., Br. of Shields	S. E cor. 55th and Rockwell sts.	1893	216	325 x 128.3 / 133.02 x 100	8,400	11,550	19,950
Forest Hill, Br. Herm'nn Raster	N. E. cor. Western av. and 79th st.	.....	42	204 x 132	2,540	400	2,940
Forrestville	N. E. cor. St. Lawrence av. and 45th st.	1892 / 1896	1,225	270.45 x 125.3	31 585	108,755	140,340
Foster	N. W. cor. Union and O'Brien sts.	1857 / 1891 / 1896	1,927	200 x 173	22,350	144,750	167,100

Franklin	Goethe st., bet. Wells and Sedgwick sts	1896	1,344	220 x 150 22 x 150	72,345	147,000	219,345
Froebel	21st st., bet. Robey st. and Hoyne av.	1885	1,164	225 x 126.6	13,500	63,900	77,400
Fuller, Melville W., and Annex	S. W. cor. 42nd st. and St. Lawrence av.	1884	710	205.25 x 126	22,600	64,730	87,330
Fulton	S. W. cor. 53d st. and Hermitage av.	1895	956	200 x 125.5	4,230	62,200	66,430
Gallistel	N. E. cor. Ewing av. and 104th st.	1898	753	200 x 121.5	6,540	71,275	77,815
Gallistel Branch	S. E. cor. Green Bay av. and 110th st.	.....	208	250 x 125	4,500	1,850	6,350
Garfield	N. E. cor. Johnson st. and W. 14th pl.	1882	648	261.35 x 99.5	16,360	47,435	110,485
Garfield Addition	.....	1884	648	.....	.....	46,690	
Gladstone	S. E. cor. Washburn av. and Robey st.	1894	957	192.53 x 124.24	16,000	69,630	85,630
Goethe	Rockwell st., bet. Milwaukee and Fullerton avs.	1895	1,055	213.65 x 183.48	10,650	84,365	95,015
Goldsmith, Oliver	210 Maxwell st., near Jefferson st	.....	.....	100 x 173.25	22,500	15,000	37,500
Goodrich	S. E. cor. Taylor and Sangamon sts.	1890 1896	1,337	214 x 100	32,000	100,050	132,050
Goudy, W. C	S. W. cor. Winthrop and Foster avs.	1892	557	200 x 148.5	13,000	51,690	64,690
Graham	Union av., from 44th pl. to 45th st.	1873	582	300.75 x 124	21,420	26,135	103,655
Graham Addition	.....	1890	642	.....	.....	56,100	
Grant	Wilcox av., bet. Western and Campbell avs.	1885	818	204 x 122	16,320	59,460	75,780
Grayland Br. of Irving Park	Irving Park blvd., bet. Milwaukee and N. 47th avs.	1896	194	163.26 x 94 158	5,700	9,510	15,210
Greeley, Horace	N. E. cor. Sheffield av. and Grace st	1894	810	242.2 x 141	19,720	70,330	90,050
Greene, Nathaniel	N. E. cor. Paulina and 36th sts.	1895	1,115	200.5 x 125.55	9,085	79,565	88,650
Greenwood Avenue	S. E. cor. Greenwood av. and 46th st	1893	893	187.36 x 185	33,000	80,060	113,060
Gresham	S. W. cor. Green and 85th sts.	1896	96	225 x 126.67	4,500	12,100	57,490
Gresham Addition	.....	1895	576	.....	.....	40,890	
Hamilton	Cornelia av., from Paulina st. to Marshfield av.	1888	901	266 x 175	18,925	43,075	62,000
Hammond	W. 21st st., bet. Douglas blvd. and California av.	1890	1,007	200 x 125	5,200	76,700	81,900
Hancock	N. W. cor. Swann st. and Princeton av.	1885	653	354.5 x 101.5	15,390	43,295	64,735
Hancock Annex	.....	.....	216	.....	.....	6,050	
Hanson Park, Br. Wm. P. Nixon	Grand av., bet. N. 54th and N. 56th sts.	1877 1896	110	S. F. Property.	.....	6,270	6,270
Harrison	23d pl. bet. Wentworth and Princeton avs.	1886	997	175 x 125	35,625	73,820	109,445
Hartigan	Armour av., bet. 40th and Root sts.	1885	575	104.5 x 104	5,270	43,325	48,595
Harvard	Harvard av., bet. 75th and 76th sts.	1889	282	200 x 160.5	11,000	20,450	31,450
Haven	Wabash av., bet. 14th and 16th sts.	1885	1,080	150 x 180	150,000	83,520	233,520
Hawthorne	School st., from Seminary av. to Clifton av.	1886 1894	1,251	263.3 x 159	18,865	87,480	106,345
Hayes	Leavitt st., from Walnut st. to Fulton st.	1868	815	267 x 140	26,700	48,960	75,660
Headley	N. E. cor. Lewis st. and Garfield av.	1875	750	195.4 x 125	20,660	40,310	60,970
Healy	Wallace st., bet. 30th and 31st sts.	1885 1895	1,350	222.5 x 125.16	14,140	85,395	99,535
Hedges	N. E. cor. Winchester av. and 48th st.	1890	638	308.5 x 124.68	7,700	44,190	51,890
Hendricks	S. E. cor. 43d st. and Shields av.	1884	845	198 x 124	11,880	41,415	53,295
Hermosa, Br. Wm. Penn Nixon	S. E. cor. Armitage and Tripp avs.	1883	96	108 x 125	3,000	3,050	6,050
Hillside, Br. Wm. Penn Nixon	S. W. cor. N. 69th and Humboldt avs.	1895	130	198.85 x 200.32	1,600	9,375	10,975
Hoerner	W. 47th pl., bet. Aberdeen st. and Center av.	1887	132	75 x 129.9	1,875	1,250	3,125
Holden	N. E. cor. 31st and Loomis sts.	1868	824	190. 236. 4, (four	25,000	47,530	157,845
Holden Addition	.....	1893	912	273.8, 330, sides)	.....	85,315	
Holmes	Morgan st., bet. Garfield blvd. and 56th st.	1894	1,039	232 x 124.67	10,440	78,840	89,280
Howland, George	S. W. cor. Spaulding av. and W. 16th st.	1893	1,063	200 x 124.95	13,545	81,035	94,580
Hoyne, Thomas	S. E. cor. Illinois and Cass sts.	1885	756	150 x 109	75,000	59,040	134,040
Huron Street	S. W. cor. Huron and Franklin sts.	1881	576	162 x 100	33,900	42,120	76,020
Iowa Street	Iowa st., bet. Central and Park avs.	1892	384	174.10 x 264.86	10,150	21,544	31,694
Irving	Lexington st., bet. Hoyne av. and Leavitt sts.	1884	875	192 x 125	14,400	61,600	76,000

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—Continued.

SCHOOLS.	LOCATION.	When Erected.	No. of Sittings.	Size of Lot.	Value of Lot.	Value of Furniture and improvements.	Total Value.
Irving Park	N. 41st ct., bet. Grace and Byron sts	1876 rebuilt 1897	345	250 x 173.6	$ 7,500	$ 15,050	$ 22,550
Jackson, Andrew	Sholto st., from Good st. to Better st.	1894	958	168.76 x 100.44	29,805	68,465	98,270
Jackson Park, Br. of Ray	56th st., head of Stony Island av	1889	198	47 x 164	5,900	17,600	23,500
Jefferson	N. W. cor. Elburn av. and Laflin st.	1884	818	200.2 x 104.5	16,020	59,240	75,260
Jefferson Park	S. E. cor. N. Winnemac and N. 53rd avs	1875	314	101.4 x 126.43	3,000	12,200	15,200
Jenner, Edward	N. E. cor. Oak st. and Milton av.	1880	672	168.5 x 100	17,500	42,055	59,555
Jirka, Frank J.	W. 17th st., bet. Loomis and Laflin sts.	1899	1,176	192 x 124	34,815	94,955	129,770
Jones	S. E. cor. Plymouth ct. and Harrison st.	1875	669	175 x 100	219,425	48,600	268,025
Keith	S. W. cor. Dearborn and 34th sts.	1883	756	200 x 122.10	15,595	65,470	81,065
Kelvyn Grove, Br. W. P. Nixon	S. E. cor. Montana st. and N. 48th ave	1874	156	200 x 120	2,600	9,900	12,500
Kenwood	N. W. cor. 50th st. and Lake av.	1889	516	280.2 x 240 / 143.6	74,000	40,500	114,500
Kershaw	Union av., bet. 64th and 65th sts.	1883	648	281 x 234	17,635	57,990	145,935
Kershaw Addition		1893	920			70,310	
King	Harrison st., bet. Western and Campbell avs.	1873 / 1885	998	196 x 158	19,600	67,825	87,425
Kinzie	N. W. cor. Ohio st. and La Salle av.	1872	486	199.1 x 100	55,345	28,900	84,245
Knickerbocker	N. E. cor. Clifton and Belden avs.	1892	1,016	200 x 124	12,255	78,300	90,555
Komensky	Throop st., bet. 19th and 20th sts.	1891	924	122 x 125.5	12,585	64,050	76,635
Kosciusko	S. W. cor. Division and Cleaver sts.	1875	671	149 x 125	19,070	38,960	58,030
Kozminski, Charles	N. E. cor. Ingleside av. and 54th st.	1897	804	213 x 188.5	20,000	95,850	115,850
La Fayette	N. W. cor. Augusta st. and Washtenaw av.	1893 / 1898	1,663	306.25 x 124.68	14,180	120,935	135,115
Lake View No. 5, Br. of George Schneider	N. W. cor. Belmont av. and Robey st.	1885	108	250 x 125	17,500	3,400	20,900
Langland	Courtland st., bet. Leavitt st. and Oakley av.	1884	649	192 x 100	12,760	49,710	63,220
Langland Annex			91			750	
La Salle	N. W. cor. Hammond and Eugenie sts.	1882 / 1893	1,156	200 x 125.5	20,000	90,710	110,710
Laurel Avenue	Cor Laurel av. and Superior st.	1896	384	161.45 x 133.92	3,400	20,621	24,021
Lawndale	N. W. cor. Central Park av. and W. 25th st.	1882	437	300 x 124.87	14,790	32,865	47,655
Lawson, Victor F.	N. W. cor. Homan av. and W. 13th pl.	1896	1,064	200 x 149.6	12,030	87,790	99,820
Lewis	On Englewood High School grounds.	1874	500			37,270	37,270
Lilydale, Br. of Burnside	S. E. cor. State and 94th sts.	1876	35	100 x 170	1,800	520	2,320
Lincoln	S. W. cor. Kemper pl. and Larrabee st.	1870 / 1894	1,350	297 x 132.5	41,950	93,390	135,340
Linne	Sacramento av., bet. Belmont av. and School st.	1895	486	216.3 x 125.75	5,685	36,045	41,730
Logan	Oakley av., from Pleasant pl. to Rhine st.	1889	855	216 x 100	7,560	61,900	69,460
Longfellow	Throop st., bet. 19th and 20th sts	1882	648	160 x 125.5	16,385	54,695	71,080
Longwood, Br. Alice L. Barnard	S. W. cor. Prospect av. and 95th st	1878 / 1898	176	200 x 203.4	7,000	13,320	20,320

Lowell	N. W. cor. Hirsch st. and Spaulding av	1894	1,094	299.6 x 123.9	9,245	73,890	83,135
Madison Avenue	Madison av., bet. 74th and 75th sts	1883	626	300 x 125.78	12,470	45,470	58,940
Manierre	Hudson av., bet. Connors and Blackhawk sts	1885	952	175 x 124.1	19,775	80,165	99,940
Mann, Horace	N. E. cor. 37th st. and Princeton av	1890	810	198.44 x 125	12,915	72,550	85,465
Maplewood, Br. of Brentano	S. E. cor. California and Diversey avs	1883	206	125 x 117.6	5,335	7,000	12,335
Marsh, J. L.	S. E. cor. Escanaba av and 101st st	1882	362	203.58 x 138.5	4,000	17,440	21,440
Marshall	Adams st., bet. Spaulding and Kedzie avs.	1895	1,218	275 x 182.7	33,675	87,110	120,785
Marquette	Wood st., from Harrison st. to Congress st	1879	905	289 x 125.87	35,575	54,250	167,865
Marquette Addition		1890	806			78,040	
McAllister	S. E. cor. 36th and Gage sts	1889	904	200 x 147	5,700	65,870	71,570
McClellan	S. E. cor. Wallace and 35th sts	1881 / 1896	1,249	224 x 125	19,000	92,935	111,935
McCosh	Champlain av., bet. 65th and 66th sts	1895	975	216.29 x 121.87	14,560	73,200	87,760
McLaren, John	N. W. cor. York and Laflin sts	1886	1,066	150 x 125	16,500	70,745	87,245
McPherson	Lincoln st., bet. Leland and Lawrence avs	1886 / 1894 / 1898	948	200 x 152.5	12,730	77,585	90,315
Medill	W. 14th pl., bet. Loomis and Throop sts	1895 / 1897	1,462	312 x 124	49,225	148,410	197,635
Mitchell, Ellen	S. E. cor. Oakley av. and Ohio st	1880	819	205 x 125	27,400	49,250	155,960
Mitchell, Ellen, Addition		1892	893	280 x 100		79,310	
Montefiore	S. E. cor. Sangamon st. and Grand av	1882	648	200 x 116.1	30,000	45,300	114,460
Montefiore Addition		1885	432			39,160	
Montrose, Br. of Irving Park	S. E. cor. Lawrence and N. 47th avs	1889	178	208.56 x 209.22	3,350	7,150	10,500
Moreland, Br. of Henry H. Nash	W. Ontario st., bet. N. 47th and N. 48th avs	1885	Closed.	150 x 120.35	3,300	5,450	8,750
Morris	S. E. cor. Noble av. and Blucher st	1896	1,125	187.24 x 132.3	30,500	81,005	111,505
Moseley	N. W. cor. Michigan av. and 24th st	1856	632	198.99 x 193	120,000	39,445	204,330
Moseley Addition		1875	625			44,885	
Moos, Bernard	California av., bet. Wabansia av. and Bloomingdale r'd	1881	542	130.88 x 125.25	6,000	28,300	34,300
Motley	Ada st., bet. Huron st. and Chicago av	1884 / 1898	1,214	216 x 100	17,400	96,340	113,740
Mulligan	Sheffield av., bet. Clay and Willow sts	1890	1,002	192 x 125	10,835	70,960	81,795
Nash, Henry H.	S. E. cor. Erie st. and N. 49th av	1896	1,136	210 x 120.55	6,795	83,690	90,485
Nettelhorst, Louis	Evanston av., from Melrose st. to Aldine av	1879	272	89.76 x 354.72ns	51,100	6,400	133,100
Nettelhorst, Louis, Addition		1893	944	116 4 x 125 s. s.		75,600	
Newberry	N. W. cor. Willow and Orchard sts	1858 / 1895	1,500	200.4 x 148.5	22,000	96,910	118,910
Ninety-second st., Br. Aub'n P'k	N. W. cor. 92d st. and Lowe av	1891	50	125 x 124	1,860	8,750	10,610
Nixon, William Penn	1200 North Forty-second Av. corner Forty-third av	1896	482	240 x 125.5	5,520	43,520	49,040
Normal	Bounded by N. Normal Parkway, S. Normal Parkway, Normal av. and C., R. I. & P. R. R. tracks		573	About 850,000 square feet.	Estima'd 300,000	23,350	436,670
Normal Practice	On Normal School grounds	1898	529			113,320	
Norwood Park	N. E. cor. Walnut and Cheney avs		190	155.1 261.9 x 200	3,000	13,700	16,700
Norwood Park Branch	Intersection of Elston and N. 62d avs.		45	133 x 145 x 149	750	1,350	2,100
Nutt Avenue, Br. Madison Av.	N. W. cor. Kimbark av. and 80th st	1894	190	161.43 x 126	4,840	9 640	14,480
Oakdale, Br. of Auburn Park	N. W. cor. Lowe av. and 89th st	1881	115	225 x 132.6	4,500	1,000	5,500
Oakland	S. E. cor. 40th st. and Cottage Grove av	1874	630	150 x 150	50,000	31,800	81,800
Oakley Avenue, Br. of Shields	N. E. cor. S. Oakley av. and W. 51st pl	1895	108	231 x 132	6,930	1,650	8,580
Oak Ridge	Prairie av., bet. 52d and 53d sts	1882 / 1896	584	200 x 179.35	20,000	52,250	72,250
Ogden	Chestnut st., bet. Dearborn av. and State st	1884	1,000	178.5 x 106.5	35,800	73,570	109,320
Ohio Street	Cor. Ohio st. and Park av.	1871 / 1882	384	140.25 x 170	18,250	9,510	27,760

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—Continued.

SCHOOLS.	LOCATION.	When Erected.	No. of Sittings.	Size of Lot.	Value of Lot.	Value of Furniture and Improvements.	Total Value.
O'Toole	N. E. cor. Bishop and W. 48th sts	1880 1898	1,047	240 x 124.25	$ 10,800	$ 84,265	$ 95,065
Parkman	S. E. cor. 61st st. and Princeton av	1876	548	215.5 x 161.7	15,050	25,400	88,360
Parkman Addition		1890	627			47,910	
Park Manor	N. E. cor. Rhodes av. and 71st st	1889	408	248 x 123.8	10,000	31,000	41,000
Parkside	N. W. cor. Seipp av. and 70th st	1888 1894	500	188.76 x 162.53	10,185	51,150	61,335
Parkside Branch	N. E. cor. Jeffrey av. and 74th st	1894	94	200 x 115.5	11,100	5,260	16,360
Peabody	Augusta st., bet. Noble st. and Ashland av	1895	876	192 x 124.3	27,000	60,660	87,660
Peterson Av., Br. Irving Park	Cor. Peterson and N. 40th avs	1845 1899	63	Leased.		2,150	2,150
Pickard	S. W. cor. W. 21st st. and Albany av	1874 1896	1,163	199.5 x 125	11,460	78,270	89,730
Polk Street	W. Polk st., bet. Desplaines and Halsted sts	1871	654	150.5 x 120	37,625	33,300	70,925
Prescott	Wrightwood av., from Ashland av. to Marshfield av	1881	713	266 x 175	19,950	30,190	50,140
Pulaski	Leavitt st., from Coblentz st. to Lubeck st	1896	918	216 x 100	9,545	65,880	75,425
Raster, Hermann	N. E. cor. Wood and S. 70th sts	1893	432	200 x 124.7	3,600	42,200	45,800
Ravenswood	S. W. cor. Paulina st. and Montrose av	1872	418	292.5 x 165	18,050	34,200	115,700
Ravenswood Addition		1893	707			63,450	
Ray	N. E. cor. Monroe av. and 57th st	1887 1894	838	198.3 x 175	36,020	57,725	93,745
Ray, Branch of Cummings	Chittenden av., bet. 121st and 122d sts		37	99 x 184	750	2,200	2,950
Raymond	S. E. cor. Wabash av. and Eda st.	1879	672	132.3 x 162.5	27,515	44,150	112,760
Raymond Addition		1886	399	50 x 174.8		41,095	
Riverdale	Intersection of Indiana and Leyden avs	1870	180	Triangle 310.31 x219.42x219.42	2,500	7,000	9,500
Rogers	W. 13th st., bet. Throop st. and Centre av	1880	660	175 x 124	10,300	41,960	52,260
Rose Hill	N. Clark st., 125 feet north of Peterson av	1881	208	163.35 x 200	4,900	9,700	14,600
Roseland, Br. of Van Vlissingen	S. W. cor. 103d st. and Michigan av	1879	110	132 x 100.05	1,750	2,200	3,950
Ryerson	S. W. cor. Lawndale av. and Huron st	1890	958	200 x 125.38	4,400	74,635	79,035
Scammon	S. E. cor. Morgan and Monroe sts	1880	922	150 x 118	30,440	49,640	80,080
Scanlan	Perry av., bet. 116th and 118th sts	1888 1897	724		4,750	77,635	82,385
Schiller	From Vedder st. to Gardner st., east of Halsted st.	1873 1893	1,193	153.42 x 216.8	15,350	86,200	101,550
Schley, Winfield Scott	Oakley av., bet. Division st. and Potomac av	1899	1,058	240 x 125.05	16,300	110,900	127,200
Schneider, George	S. E. cor. Hoyne av. and Wellington st	1896	972	200 x 124.73	9,400	80,360	89,760
Scott, James W	N. E. cor. 54th st. and Monroe av	1880	501	192 x 166.5	25,740	24,965	54,555
Scott, James W., Annex		1893	Vacant			3,850	
Scott, Walter	Bet. 64th and 65th sts., running through from Jefferson av. to Washington av	1896	800	150 x 190	30,640	63,180	93,820
Seward	S. W. cor. S. Hermitage av. and 46th st.	1894	1,091	242.5 x 124.7	9,270	72,625	81,895
Sheldon	S. W. cor. State and Elm sts	1874	598	200 x 150	61,225	37,860	99,085

Sheridan, Mark	S. E. cor. 27th and Wallace sts	1881	790	200 x 124.9 75 x 100	18,000	49,250	67,250
Sheridan, Phil	S. E. cor. Escanaba av. and 90th st	1888	576	330 x 138.5	21,560	50,360	140,060
Sheridan, Phil., Addition		1896	584			68,140	
Sherman	Morgan st., bet. 51st and 52d sts	1884	446	250 x 124.8	10,000	23,280	72,615
Sherman Addition		1887	683			39,335	
Sherwood	S. E. cor. 57th st. and Princeton av	1885 1892	1,271	261.4 x 156.1	10,190	109,195	119,385
Shields	N. W. cor. 43d and Rockwell sts	1879	288	237.33 x 247.52	8,000	9,250	17,250
Skinner	N. E. cor. Jackson blvd. and Aberdeen st	1859	1,172	145 x 189	47,270	50,600	97,870
Smyth, John M	W. 13th st., bet. Blue Island av. and Waller st	1897	1,151	192 x 107	27,200	81,985	109,185
Springer	N. W. cor. Wabash av. and 41st st.	1874	575	142.75 x 160.6	24,000	23,300	47,300
Spry, John	S. W. cor. S. W. Boul. and W. 24th st	1899	1,274	231 x 217.3	12,225	111,045	123,270
Stony Island Avenue	S. E. cor. Stony Island av. and 93d st	1887	191	150 x 125	4,500	7,300	11,800
Sumner	S. 43d av., bet. Colorado av. and Harrison st	1894	1,154	275 x 125.82	11,000	78,425	89,425
Swing, David	String st., bet. W. 16th and W. 18th sts	1895	1,034	192 x 122.55	27,000	62,455	89,455
Talcott	N. E. cor. Ohio and Lincoln sts	1871	540	216 x 123.7	12,000	33 000	84,670
Talcott Addition		1896	484			39,670	
Taylor	Avenue J, bet. 99th and 100th sts	1881 1894	600	100 x 125	4,000	49,650	53,650
Tennyson	N. W. cor. Fulton st. and California av	1896	963	255.6 x 150	11,670	69,490	81,160
Thomas, George H	S. W. cor. High st. and Belden av	1890	752	100 x 128	8,960	54,580	63,540
Thorp, J. N	S. E. cor. Superior av. and 89th st	1893 1896	972	130 x 140	8,400	83,515	91,915
Throop	Throop st., bet. 18th and 19th sts	1878	900	198 x 125	20,395	53,410	73,805
Tilden	N. E. cor. W. Lake and Elizabeth sts	1896 1897	940	206.6 x 164.75	31,660	85,425	117,085
Tilton	S. E. cor. W. Lake st. and S. 44th av	1874	755	205.8 x 228.7	22,500	42,845	65,345
Trumbull, Lyman	N. E. cor. Sedgwick and Division sts	1872	824	181.05 x 264	Sch'l F'd	39,865	84,145
Trumbull, Lyman, Addition		1878	810		property	44,280	
Van Vlissingen	W. 108th pl., bet. Wentworth av. and State st	1893	1,049	275 x 124.95	9,000	82,300	91,300
Von Humboldt	Hirsch st., from Tallman av. to Rockwell st	1885	836	266 x 179.7	18,400	55,480	154,090
Von Humboldt Addition		1895	997			80,210	
Wabansia Avenue	Wabansia av., bet. Ballou st and Kimball av		263	147.2 x 177	5,300	6,730	12,030
Walsh	S. E. cor. W. 20th and Johnson sts	1882	648	286.5 x 239 w.s.	32,550	45,375	137,075
Walsh Addition		1886	808	286.5 x 91.12 e.s.		59,150	
Ward	S. E. cor. Shields av. and 27th st	1874 1897	1,011	204 x 125	12,100	75,960	88,060
Washburne	W. 14th st., bet. Jefferson and Union sts	1869 1888 1893	1,213	200 x 173	25,000	94,415	119,415
Washington	Morgan st., bet. Ohio and Erie sts.	1871	1,032	217 x 116	27,125	53,910	81,035
Webster	S. E. cor. Wentworth av. and 33d st.	1883	810	200 x 125	15,000	58,635	73,635
Wells	N. W. cor. Ashland av. and Cornelia st	1865	870	306.5 x 130	30,650	56,800	154,195
Wells Addition		1883	822			66,745	
Wentworth, D. S.	N. W. cor. Sangamon and 70th sts	1890 1893 1896	1,352	200 x 125	6,000	125,315	131,315
West Pullman	N. E. cor. Parnell av. and 120th st	1894	1,010	250 x 123.5	7 500	79,375	86,875
Whittier	N. W. cor. W. 23d and Lincoln sts	1893	1,094	222 x 124	12,040	79,450	91,490
Wicker Park	Evergreen av., bet. Robey st. and Hoyne av	1881 1894	1,227	209.25 x	21,430	105,535	126,965
Willard, Frances E	S. E. cor. St. Lawrence av. and 49th st	1898	1,008	200 x 127.96	22,965	85,165	118,130
Woodlawn	Lexington av., bet. 64th and 65th sts	1889 1894	1,373	212.85 x 150	19,290	90.790	110,080

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—Continued.

SCHOOLS.	LOCATION.	When Erected.	No. of Sittings.	Size of Lot.	Value of Lot.	Value of Furniture and improvements.	Total Value.
Worthy, John	On grounds of House of Correction	1895	255			$ 82 315	$ 82,315
Yale	70th st., from Yale av. to Princeton av	1887 1894	985	264 x 150	$ 17,160	95 975	113,135
Yates, Richard	S. E. cor. Humboldt and Courtland sts	1896	1,167	300 x 120	10,440	103,040	113,480
Work shop and supply room	On School Fund Property	1870 1891 1897				96,210	96,210
	VACATE SITES.						
	†W. 36th st., N. E. cor. Maplewood av			236.49 x 127	$ 4,500		$ 4,500
	†Loomis st., S. W. cor. 53d st			250 x 124.47	8,000		8,000
	†Park av., N. W., cor. S. 50th av			180 x 190	5,500		5,500
	†95th st., N.W. cor. S. Leavitt st			175 x 175	3,000		3,000
	†E. Elizabeth st., bet. W. 106th and W. 107th sts			44.31 x 123	400		400
	†Martin st., bet. W. 106th and W. 107th sts			25 x 123	250		250
	‡Armitage av., bet. N. 48th and N. 49th avs			225 x 125	5,400		5,400
	‡33rd pl., bet. Auburn av. and S. Morgan st			176 x 145.8	5,000		5,000
	†Avenue "M," N. W. cor. 97th st			194.7 x 124	8,500		8.500
	†"Brookline lot," 74th st from Evans av. to Langley av			295.7 x 136.3	11,800		11.800
	†Jeffery av., S. E. cor. 71st st			297 x 115.5	20,000		20.000
	†Carpenter st., bet. 90th and 91st sts			100 x 125	1.500		1,500
	‡W. 19th st., w. of and near Douglas Park blvd			115.5 x 166	6,000		6,000
	‡Phillip av., S. E. cor. 92nd st			201.1 x 125.59	5,800		5.800
	‡Orchard st., N. E. cor. Center st.*			297.5 x 125	50,000		50,000
	‡Butler st., N. E. cor. 81st st			297 x 249.3 n. s. 200 s. s.	18,000		18,000
	‡W. 15th pl., N. E. cor. Washtenaw av			199 2 x 124.5	13,900		13.900
	‡Morgan st., S. W. cor. 117th st			248.3 x 125.27	3,000		3.000
	‡S. Sawyer av., N. W. cor. 53rd st.*			249.65 x 126.1	4,000		4,000
	‡Union av , N. E. cor. 101st st.*			198.4 x 125.16	2,380		2,380
	‡Calumet av., bet. 41st and 42nd sts.*			195 x 128	29.732		29.732
	‡Mohawk st., N. E. cor. of Menomonee st			163 x 119	33,500		33 500
	‡Prairie av., bet. 38th and 39th sts			200 x 264	46.711		46,711
	‡Edmunds av., N. E. cor. Goodman st			263.25 x 150	3,000		3,000
	‡N. 42nd court, S. E. cor. W. Cullom st.*			247.25 x 155.69	5,000		5.000
	†N. 63d av., a half mile north of Fullerton av			146.52 x 146.52	1,000		1,000
Rooms in Rented Buildings			15,406			$ 31,470	31,470
Manual Training in Grammar Schools	Tools, Benches, etc					29,570	29,570
Grand Totals			238,209		$5,712,158	$17,203,735	$22,915,893

*Building in process of erection. †Acquired by annexation. ‡Acquired by purchase.

HIGH SCHOOLS.

ENROLLMENT, ETC., DURING THE SCHOOL YEAR 1899-1900.

HIGH SCHOOLS	ENROLLMENT.															AGE AT DATE OF FIRST ENROLLMENT DURING THE YEAR.								
	Ninth Grade.			*Tenth Grade.*			*Eleventh Grade*			*Twelfth Grade.*			*Total.*											
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Under 13 Years.	Between 13 and 14 Years.	Between 14 and 15 Years.	Between 15 and 16 Years.	Between 16 and 17 Years.	Between 17 and 18 Years.	Between 18 and 19 Years.	Over 19 Years.	Total.
Austin	67	117	184	32	64	96	25	53	78	10	31	41	134	265	399	2	28	81	99	89	52	34	14	399
Calumet	57	72	129	33	58	91	19	43	62	9	24	33	118	197	315	3	24	56	63	67	54	36	12	315
Englewood	137	313	450	78	203	281	49	114	163	38	99	137	302	729	1,031	8	41	158	237	276	160	88	63	1,031
English High and Manual Training	304	.....	304	170	.....	170	103	.....	103	....	.....	.....	577	.....	577	....	50	117	156	132	80	28	14	577
Hyde Park	178	342	520	113	295	408	84	214	298	65	181	246	440	1,032	1,472	13	58	206	352	349	260	150	82	1 472
Jefferson	42	73	115	22	46	68	15	27	42	10	37	47	89	183	272	....	9	62	91	56	34	16	4	272
Lake	40	89	129	28	54	82	12	50	62	10	40	50	90	233	323	2	26	68	72	70	48	29	8	323
Lake View	113	298	411	81	194	275	46	128	174	33	108	141	273	728	1,001	7	47	150	275	236	173	73	40	1,001
Marshall	55	192	247	39	128	167	29	91	120	15	47	62	138	458	596	7	29	101	162	145	90	44	18	596
Medill	113	142	255	45	91	136	33	46	79	17	46	63	208	325	533	53	55	106	121	87	72	24	15	533
North Division	71	175	246	42	92	134	22	60	82	13	63	76	148	390	538	3	32	108	128	110	90	51	16	538
North-West Divis'n	122	288	410	69	186	255	25	93	118	24	*9 80	*9 104	240	656	896	17	73	190	216	202	112	53	33	896
South Chicago	65	78	143	24	59	83	14	54	68	7	40	47	110	231	341	1	22	65	83	79	52	23	16	341
South Division	113	251	364	70	149	219	31	115	146	33	76	109	247	591	838	13	67	141	221	176	125	61	34	838
West Division	111	320	431	65	249	314	39	167	206	38	120	158	253	856	1,109	18	63	187	252	269	176	90	54	1,109
Totals	1,588	2,750	4,338	911	1,868	2,779	546	1,255	1,801	322	1,001	*9 1,314	3,367	6,874	10,241	147	624	1,798	2,528	2,343	1,578	800	423	10,241

*Post Graduates.

HIGH SCHOOLS.

ATTENDANCE, PROMOTIONS, ETC., DURING THE SCHOOL YEAR 1899–1900.

HIGH SCHOOLS.	AVERAGE DAILY MEMBERSHIP.					AVERAGE DAILY ATTENDANCE.					PER CENT. OF ATTENDANCE.					PROMOTIONS BY GRADES.				
	Ninth Grade.	Tenth Grade.	Eleventh Grade.	Twelfth Grade.	Total.	Ninth Grade.	Tenth Grade.	Eleventh Grade.	Twelfth Grade	Total.	Ninth Grade.	Tenth Grade.	Eleventh Grade	Twelfth Grade.	Total.	Ninth Grade.	Tenth Grade.	Eleventh Grade.	Graduates.	Total.
Austin	150.9	77.6	66.5	37.5	332.5	143.5	73.8	64.0	36.7	318.0	95.1	95.1	96.2	97.9	95.6	95	65	45	39	244
Calumet	120.7	76.4	55.1	28.4	280.6	115.1	72.7	51.8	26.2	265.8	95.4	95.1	94	92.3	94.7	97	56	49	27	229
Englewood	386.1	265.1	143.1	124.5	918.8	371.0	253.6	136.9	120.7	882.2	96.1	95.7	95.7	97	96	191	178	99	116	584
English High and Manual Training	266.8	158.4	94.2	.....	519.4	257.6	152.8	91.1	.....	501.5	96.5	96.5	96.7	.....	96.6	210	124	....	77	411
Hyde Park	446.6	359.8	261.7	228.1	1296.2	425.7	337.9	244.1	211.0	1218.7	95.3	93.9	93.3	92.5	94	364	284	231	205	1,084
Jefferson	102.7	59.2	34.1	44.2	240.2	100.3	58.9	33.9	44.1	237.2	97.7	99.5	99.4	99.8	98.8	85	50	35	46	216
Lake	120.2	74.2	55.5	48.2	298.1	116.8	72.8	53.9	47.5	291.0	97.2	98.1	97.1	98.5	97.6	77	59	41	49	226
Lake View	373.5	247.6	158.0	134.4	913.5	358.0	236.0	151.1	129.2	874.3	95.9	95.3	95.6	96.1	95.7	256	191	130	124	701
Marshall	215.8	150.6	107.7	56.9	531.0	205.1	143.5	102.3	54.2	505.1	95.0	95.3	95.0	95.3	95.1	136	126	91	54	407
Medill	228.3	119.8	71.6	60.0	479.7	221.0	114	68.7	56.5	460.2	96.8	95.1	96	94.2	95.9	122	83	57	58	320
North Division	222.5	117.4	74.4	74.0	488.3	211.9	110.9	72.1	71.2	466.1	95.2	94.5	96.9	96.2	95.5	144	100	72	74	390
North-West Division	363.8	219.3	104.9	*4.2 101.8	794.0	345.8	208.4	100.7	*3.8 96.7	755.4	95.1	95	96	*90.5 95.0	95.1	291	143	90	101	625
South Chicago	147.0	72.1	64.2	46.2	329.5	139.3	68.6	60.3	44.5	312.7	94.8	95.1	94	96.3	95	74	49	61	45	229
South Division	340.8	176.4	132.6	105.2	755	325.4	168.7	128.4	101.0	723.5	95.5	95.6	96.9	96	95.8	137	107	112	100	456
West Division	394.9	281.6	191.4	145.3	1013.2	380.7	269.8	183.1	139.3	972.9	96.4	95.8	95.6	95.9	96	280	217	158	134	789
Totals	3880.6	2455.5	1615.0	1238.9	9190.0	3717.2	2342.4	1542.4	1182.6	8784.6	95.8	95.4	95.5	95.7	95.6	2559	1832	1271	1249	6,911

*Post Graduates.

BOARD OF EDUCATION—1900-1901.

GRAHAM H. HARRIS, ... *President.*

THOMAS GALLAGHER, ... *Vice-President.*

LEWIS E. LARSON, ... *Secretary.*

MEMBERSHIP.

THOMAS BRENAN, 216 Reaper Block, Clark and Washington Streets, .. 1902

DANIEL R. CAMERON, 73 Lake Street, ... 1902

CLAYTON MARK, Twenty-sixth Street and Blue Island Avenue, ... 1902

MRS. CAROLINE K. SHERMAN, 418 La Salle Avenue, ... 1903

JOHN T. KEATING, Room 924 Chicago Opera House Block, ... 1903

THOMAS GALLAGHER, 241 South Sangamon Street, ... 1903

BERNARD F. ROGERS, 154 La Salle Street, ... 1903

GRAHAM H. HARRIS, Room 1203 Schiller Building, ... 1903

CHRISTIAN MEIER, Room 42, No. 70 La Salle Street, ... 1902

MRS. ISABELLE O'KEEFFE, 4857 Michigan Avenue, ... 1901

JOSEPH DOWNEY, 132 La Salle Street, ... 1901

JAMES A. PETERSON, Room 1313 Chamber of Commerce, . .. 1901

C. R. WALLECK, 544 Blue Island Avenue, ... 1901

F. J. LOESCH, Room 305 Ashland Block, ... : .. 1901

AUSTIN O. SEXTON, Room 28, No. 163 Randolph Street, . .. 1901

JOSEPH STOLZ, 157 Forty-second Place, ... 1902

CHESTER M. DAWES, 209 Adams Street, ... 1902

JOHN F. WOLFF, 93 West Lake Street, ... 1901

GEORGE W. CLAUSSENIUS, Room 1, 94 Dearborn Street, ... 1902

EDWARD TILDEN, 4612 Emerald Avenue, ... 1903

EDWIN F. ROWLAND, 25-27 River Street, ... 1903

HEADS OF DEPARTMENTS.

E. G. COOLEY, ... Superintendent

DANIEL J. MCMAHON, ... Attorney

JOHN A. GUILFORD, ... Business Manager

THOMAS J. WATERS, ... Chief Engineer

GEORGE G. CUSTER, ... Auditor

JOHN W. FOSTER, ... Superintendent of Supplies

WILLIAM B. MUNDIE, ... Architect

LEWIS E. LARSON, ... Secretary

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